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LISTED CORN.  
Its Cultivation and Advantages.

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FOR THE CULTIVATION of listed corn there have been a great many specially-constructed tools brought out, those of the sled type predominating. These were made narrow, the runner being not more than 10 or 12 inches apart, so that both would run in the same furrow at the same time. To their sides were attached knives which in passing cut into the sides of the adjoining ridges, while the cross pieces, extending perhaps two feet on either side, scrape the tops of the ridges. These and other special tools are used to a limited extent, but are gaining ground very slowly, if at all. Our farmers seem to think that

A GOOD TWO-HORSE CULTIVATOR and a short-tooth harrow are all the necessary tools for thorough cultivation; at least, they are the ones

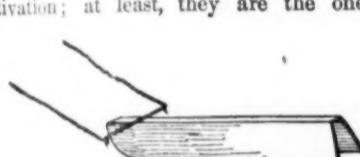


FIG. 1.

most used. Of course, they must be properly constructed, adjusted, and handled to give best results.

It was formerly the quite general custom to run the plank drag over the field soon after planting, to pulverize the soil and flatten the crests of the ridges; but this practice has been to a great extent superseded by that of harrowing, while some good farmers use neither harrow nor plank, preferring to handle all of the soil with the cultivator. Harrowing is usually done soon after the plants appear.

This is heroic treatment, and the young plants are sometimes buried almost out of sight, but with our bright sunshine and light, warm soil they soon come up smiling. The disk harrow is also coming into use for this purpose and is well spoken of by those who have tried it.

I presume that every farmer who ever practiced listing has, like the writer, a very distinct recollection of his first experience in plowing listed corn.

A team unused to the work invariably persists in walking in the furrows rather



FIG. 2.

than upon the ridges, as they should do. Then, the soil just as persistently rolls down the slope, almost filling the furrow, while the plow handles seem determined to lock arms across the row. Thus it requires much experience and many experiments to get things so adjusted that they will "work together for good."

and in the meantime there is too often considerable of the bad, both in work and word. When team and plowman, come to thoroughly understand their business, however, it is no more difficult to "tend" listed, than top, planted corn.

THE INVERTED TROUGH.

A few years ago the inverted trough, made of pine boards (Fig. 1), was most universally used at the first plowing, being tied to the cultivator in such a way that it was drawn along in the trench, over the row, and directly between the shovels, so that the soil

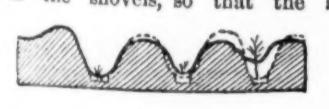


FIG. 3.

fell upon the trough and at its passage settled gently about the plants.

In using the trough the front shovel on either side is removed, the shanks resting against the sides of the trough.

WEED KILLING.

The best and most effective weed killing can be done when weeds are small—the smaller the better. Hence the entire surface between the rows should be operated upon at first working, as the above plan left only two shovels to do the work; many have discarded the trough and use instead large shields made by riveting pieces of heavy sheet iron about 12x28 inches in size onto the regular small shields. These are

used in connection with four shovels, the inside ones being set low to cut the side of the ridge, while the rear ones work on top. Fig. 2 will serve to give the reader some idea of the size and position of these shields. They can be so adjusted in height that the fine soil will run under them about the plants, while the row is always in plain sight of the plowman.

GROWTH.

Fig. 3 represents a row just up, one after harrowing and one after first culti-

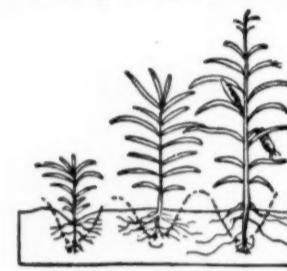


FIG. 4.

vation. At the second plowing we have used the regular outfit of four shovels, setting the shields as high as the size of the corn would permit, and when "laying by" the mold board shovels, which do thorough work without running very deep or close to the row. At Fig. 4 we have a row after second working,

ONE "LAID BY,"

and another of full grown corn, with the roots deep down in the soil. In plowing a piece of stony ground recently that had been listed last season, we found the stalks so deep set that the plow running six inches deep made a great cracking among the roots. Fig. 5 shows one of these roots picked up at random and split through the center. The distance from surface of ground at A to bottom of stalk at B is six inches.

The advocates of the listing method claim, first, that they can grow more and

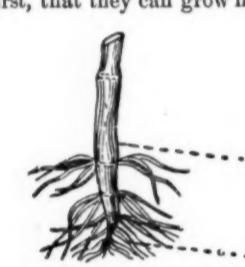


FIG. 5.

better corn on more acres, and do it easier and cheaper, by listing than in any other way.

Second. The crop is more readily kept clean, for the ridges are being gradually worked down as the corn grows up, allowing of reasonably deep and thorough cultivation without mutilating the roots or unduly ridging the land.

Third. The brace or "spur" roots start at or near the surface of the ground, where they at once take a hold in the soil and assist in supporting the plant. Thus, they claim that listed corn endures storm and drought better than top planting.

Fourth. Listing

ALLOWS OF DRILLING

then the seed one grain in a place, and yet gives every facility for keeping the land clean and mellow; and as corn planted by single grains produces larger and more uniform ears, the yield is greater and the quality better.

Not every part of Kansas is as well adapted to the listing process, or indeed to the production of corn by any process, as are the northeastern Counties. Let it be understood that we are located in an arid region, where methods other than listing do not succeed, or that the lister is looked upon with universal favor. Some among our best farmers prefer to plow and top-plant in regular Eastern style. Among these we might mention Mr. J. M. Funk, an AMERICAN FARMER subscriber, whose fine farm lies directly across the road from where we write. He is one of our most successful farmers, though a lister stored in his tool-house has not been used for years. Old settlers who, like Mr. Funk, have been here for 20 years and made farming a success, can give the tenderfoot practical points on prairie farming worth forkfuls of fine-spun theories drawn from Eastern experience.

Again, the lister is not adapted to ground, and as our farmers are beginning to realize that in order to maintain the fertility of the soil they must diversify their crops, growing more tame grass and clover, the listing process is perhaps as popular to-day as it will ever be. Many of us fail, I think, to draw the line between the judicious use and the abuse of the listing habit. We cast all our cornfield care upon the lister, but off more than we can chew, because it is so easy to rush in a large acreage in the Spring when the ground is clean and soft, forgetting or ignoring the fact that thorough preparation of the soil is an essential requirement of good farming, whatever methods we may adopt.

## OEDEMA OF APPLE TREES.

### Result of Too Severe Pruning.

During the month of July specimens of diseased apple twigs were received from Mr. E. A. Crow, of New York City. The soft outer tissue of the limbs was in a state of decay and occupied by a fungus, some species of *Fusarium*, which resembled *F. aecuum* B. & C., which was described from the bark of *Pirus malus* in South Carolina. Mr. Crow had supposed this fungus to be the cause of the trouble and had tried the use of the Bordeaux mixture after having scraped off the bark from the diseased places. Since so many of the species of the genus *Fusarium* grow only in tissues which have been injured by some other agent and all of the material which was first received was in such an advanced state of decay, I requested Mr. Crow to send me some fresh specimens which would represent the entire progress of the trouble from its inception. From this material, which was received in good condition, the external peculiarities of the disease may be described as follows:

Minute elevations appear on the surface of the branches or trunks which gradually increase in size from one-eighth to one-fourth of an inch long and nearly as wide. They are usually quite close together and frequently by increase in size become confluent when a large number extend over quite a large surface and appear as one of very irregular form. These elevations present the appearance of blisters and they are well shown in Fig. 1, which is from a photograph of three of the specimens received. Two of them show the appearance of the twigs when the blisters are most prominent, while one of them shows the collapsed condition of the tissues which always results after the tissues are broken down from decay.

Microscopic sections through the parts of the twigs where the trouble is present shows that no fungus is present, and in fact there is no ground for the causal connection of any parasitic organism.

Immediately beneath the periderm the young phloem tissue at the points of the blisters is seen to be very greatly elongated radially. This radial elongation of the phloem causes the periderm to be raised in the form of a blister.

Beside the radial elongation of the phloem cells they are also very much distended. This distension continues until the cell walls are no longer able to stretch, because they become so thin that they break and the cells collapse. This collapse of the phloem causes the blisters to burst, and in drying these affected areas are depressed below the normal surface of the twig. Also, the dying tissue forms a nodule for such saprophytic fungi as the *Fusarium* which was in many cases present. This drooping swelling of the tissues is of the same nature as that which occurs sometimes with tomatoes when grown under conditions which favor rapid and continuous root absorption, and at the same time hinder transpiration or growth.

Among these may be particularly mentioned the Ningara, Moore's Early, Moore's Diamond, Salem, Worden, Woodruff Red, and Wyoming Red. The Ningara has been found to succeed in almost any locality providing it is bagged. It seems to require this treatment more than any other grape.

In regard to the Woodruff Red, Secretary Engle reported: "One of the most promising new varieties fruited this year was Woodruff Red. Although not first-class in quality, it is a beautiful grape, keeps well and holds its foliage to the last."

Casper Hiller, of Lancaster County, marks Woodruff Red quite high, and says that the Eaton and Woodruff Red are both very showy and fairly good, and consequently they bring the highest prices. Dr. Groff, of Lewisburg, says his Moore's Early and Ningara grapes were "as fine as fine could be."

He intends planting 100 Moore's Early in the Spring. Prof. Heiges, of York, has 46 varieties of grapes fruiting, and mentions in particular Woodruff Red, Wyoming Red, and Moore's Diamond as having been very superior.

R. M. Welles, of Towanda, gives his experience in regard to varieties during the season of 1893, as follows: "Woodruff Red is a poor bearer. Empire State, Moore's Early, Ningara, Worden, Delaware, Brighton, and Concord are all good croppers. The Lady and Jessie do well, but are not reliable. Jefferson is good, but not very superior.

E. C. Briner, of Dauphin County, relates his experience as follows: "Concord, Worden, Moore's Early, Cottage, Eaton, Jewell, and Ningara were fine. Daisy is early. Telegraph and Champion are good. Empire State is not satisfactory. Pocklington and Brighton are poor."

W. B. K. Johnson, of Lehigh, who

has a number of new varieties in cultivation, says: "Wyoming Red is the best.

Eaton is improving. Woodruff Red is good. May be doubtful."

As to other new varieties he prefers to report after another year's trial.

Spraying or bagging was essential to insure success.

M. T. Donnoyer, one of Berks County's most successful grape growers, has found that he cannot raise grapes successfully without resorting to spraying or bagging. Many other growers in the State give this as their

experience.

In the case of the tomato edema the unequal operation of the physiological laws was due to certain unfavorable con-

ditions of greenhouse lighting and heating.

This would not apply to the case of the apple trees which were grown outdoors.

But since the trouble was like

in kind the cause would probably be

found in some condition of soil cultivation, or pruning of the trees, which

would favor root absorption and hinder

transpiration or growth at a sufficient

number of points on the tree to take

charge of all the water which the roots

absorbed. Inquiry of the owner developed the fact that the soil in the young orchard was very fertile and well worked, and that the conditions so far as soil was concerned were very favorable for rapid root absorption and growth. In fact, the trees grew very luxuriantly and were the marvel of the neighborhood. But during the Winter and early Spring they were very severely pruned. According to the owner they were pruned very close, leaving only the main limbs and twigs and a few secondaries, and the new growth was cut back one-third. This left but few growing points. When root absorption and growth began in the

spring the trees were in full bloom.

Editor AMERICAN FARMER: Spring

finds me busy. My head and heart

are both full of care for the coming

year. We have commenced our Spring

plowing. This week I hope to finish

plowing between 30 and 40 acres of crop

land with two teams. We can nicely

plow two acres per day in good weather

and while land is in such good condition.

This done we are then masters of the situation on our farm.

First comes the seed bed fitting for oats and early garden.

Our oat ground is made fine as an onion bed; no lack of tillage

should ever happen. It is not half as

important to mud them in early as it is

to have perfect tillage and do the work

to perfection. I aim for a hundred

bushel acre per acre every year of good,

heavy, white oats. I have already

had a crop of over 83 bushels per acre,

and I shall keep shooting at my mark

until I hit my bull's-eye.

On my soil one and one-half bushels

of oats per acre drilled each way,

making three bushels of seed per acre, is

none too much. It spreads the oat

plants so evenly and nicely, it most com-

pletely shuts out all chance for barn

grass or foul weeds to grow. I use manure

and fertilizers both in abundance when needed, and grow my oats just as

large as they can be made to stand up.

The harvester has a mouthful every

moment of its work, and I oftentimes

clog the separator elevator with oats if

they do not go slow in feeding the

machine when thrashing time comes.

POTATOES.

Next we fit our potato ground and

usually plant from 5 to 10 acres of them.

This needs the best of tillage also, and

further, needs a good, heavy, red clover

sod to feed the growing tubers while de-

composition and transformation into

plant food is going on among the up-

turned roots of clover. I like clover

sod manure best for potatoes. You

then have no scabby, worm eaten crop

for stock feed or merchants to grow

about or consumers to throw away from

the washpan when fitting them to cook.



## CARE OF TROTTING HORSES.

Something of an Art that Far too Few Understand.

**EDITOR AMERICAN FARMER:** There are but few people who know how to properly take care of the trotting horse. It is a great art. It requires long practice, close observation, and the best judgment. In this article we shall have something to say about giving him feed, exercise, training, etc., and speak of grooming as generally understood—that is, currying, brushing, rubbing and keeping his coat and skin in order. Not only his looks, but his health, strength, and speed, depend in a great measure upon the grooming he receives. The object of the groom should be to remove all dirt, dandruff and other impurities, from the hair and skin; also, to open the pores of the skin, and remove all obstructions. This should be done on every part of the body and limbs; no part should be slighted. Now, as to how this should be done. A good stiff brush is the best thing to use for the purpose. The curry comb should only be used to remove mud, and particularly upon a nervous horse with a thin skin. Some grooms like to apply the curry comb on the tender skin of the horse, to put him in all the agony possible. They like to see him kick and bite. They will rub him in the flank and under the belly with additional strength, to see what answer he will give. We have sometimes thought we would like to give these fellows a rubbing down or two, to teach them how good it feels. It spoils the temper of the horse; makes him a biter or a kicker; it does him no good, but great injury. The groom will yell, or kick or beat the poor horse, after putting him in such agony. The tone of the voice in the stable should always be soft and kind. The horse should learn that man is his friend, not a tyrant and enemy. The grooming should be done in the gentlest possible manner, particularly on nervous horses. With the brush in one hand and the curry comb in the other, to remove the dirt from the brush, go over gently, but thoroughly, every part of the horse. Get the dirt all out of the hair and off the skin. After the brushing is done, take cloths and brush the horse thoroughly, getting up a friction which will set the pores to work. It will make the hair glossy. Old salt sacks are the best rubbers that can be used. A supply of these should always be kept on hand, clean and dry. The feet should then be washed out clean and dried.

One thorough cleansing a day is enough, if done after exercise; but it is usual to give him a partial cleansing in the morning before work, and then a thorough one after his exercise, and again a rubbing after the evening walk. This is all well enough, but some grooms keep at work all the time at their horses, allowing them no time to rest. This is wrong. The horse should not be interfered with after the rubbing he receives after his exercise in the morning till he gets his evening walk. He will take his feed at 9 o'clock in the morning and rest till noon, when he will again take his feed, and rest till 3 or 4 o'clock, when it will do him good to have a walk of half an hour or so, and then a careful rubbing will be beneficial.

When a horse comes in from his exercise sweating, a blanket should be thrown over him to keep the sweat from cooling off, and a couple of good men should rub him dry as soon as possible. The hood and blanket can be applied once or twice a week on most horses beneficially to draw out a greater amount of perspiration, opening the pores of the skin, reducing the surplus matter, and cleansing the pores. But this should not be carried too far, or it will weaken and injure him. No horse can be put in proper condition for trotting without the most careful attention to grooming. It is just as important as it is to give him the proper amount of feed and work.

A great interest is now awakened in the trotting horse. There are strains of trotting blood just as reliable as in racing blood. Trotting horses can be bred as successfully, and far more profitably, than racehorses. Every one wants a fine moving horse, be he merchant, farmer or divine. It is no stigma to a man in any profession that he loves a good horse, a horse that can carry him along rapidly when he wants to go rapidly, and if farmers would pay more attention to breeding good trotters they would find their profits much increased.

The condition of the horse depends much upon the management of the stable. Clean, well-ventilated apartments are indispensable to the health of all animals. The air once breathed is not fit to inhale the second time. It should be let off through conductors while rarefied in the act of respiration before it becomes impregnated with the foul air that escapes from the excrement and condenses with their elements to settle down and create disease. The first duty is to cleanse and purify the stable from those obnoxious gases that corrupt the blood and produce diseases that destroy the usefulness and endanger the life of valuable horses.

It is another condition of health that we provide fresh, clean, wholesome food. It is a fatal delusion in stable economy to use inferior oats or hay. They are

be turned out, if the weather is not too cold. It may be useful to add that, after the horse has once been well dressed with either of these liniments, the danger of contagion ceases. It is necessary, however, to be assured that every mangy place has been apparently cured, and to continue the alterations for 10 days or a fortnight. The cure being completed, the clothing of the horse should be well soaked in water to which a fourth part of the saturated solution of the chloride of lime has been added; after which it should be washed with soap and water, and again washed and soaked in a solution of the chloride of lime. Every part of the harness should undergo similar purification. The curry comb may be secured, but the brush should be burned. The rack and manger, and partitions, and every part of the stable which the horse could possibly have touched, should be well washed with a hair broom, a pint of the chloride of lime being added to three gallons of water. All the wood work should then be scoured with soap and water, after which a second washing with the chloride of lime will render all secure.—A FARMER, Columbian County, O.

## MANE IN HORSES.

What Produces It, and How It Should be Treated.

**EDITOR AMERICAN FARMER:** Mange in horses is a pimpled or vesicated eruption. After a while vesicles break, or the cuticle and the hair fall off, and there is, as in obstinate surfeit, a bare spot covered with scurf, some fluid oozing from the skin beneath, and this changing to a scab, which likewise soon peels off and leaves a wider spot. This process is attended by considerable itching and tenderness and thickening of the skin, which soon becomes more or less folded or puckered. The mange generally appears on the neck at the root of the mane, and its existence may be suspected even before the blisters appear, and when there is only considerable itchiness of the part, by the ease with which the short hair at the root of the mane is plucked out. From the neck it spreads upward to the head or downward to the withers and back, and occasionally extends over the whole carcass of the horse. If the same brush and currycomb is used on all the horses, the propagation of mange is assured, and horses feeding in the same pasture with a mangy one rarely escape, from the propensity they have to nibble one another. Mange in cattle has been propagated to the horse, and from horse to cattle. There are also some well-authenticated instances of the same disease being communicated from the dog to the horse, but not from the horse to the dog. Mange has been said to originate in want of cleanliness in the management of the stable. The comfort and the health of the horse demand the strictest cleanliness—the eyes, the lungs, and the skin; but in defiance of common prejudice there is no authentic instance of mange being the result of opposite conditions.

Poverty and starvation are fruitful sources of mange, but it does not appear that filth has much to do with it, although poverty and filth generally go hand in hand. The propriety of bleeding in case of mange depends on the condition of the patient. If it is the result of poverty, and the animal is much debilitated, bleeding will increase the evil, and will probably deprive the constitution of the power of rallying. Physic, however, is indispensable in every case. A mercurial ball will be preferable to a common aletic one, as more certain and effectual in its operation, the mercury probably depriving the skin of the caustic potash process having some influence in mitigating the disease. In this, however, mange in the horse resembles itch in the human being. Medicine alone will never effect a cure; there must be some local application. There is this additional similarity: that which is most effectual in curing the itch in a human being must form the basis of every local application for the cure of mange in the horse. Sulphur is indispensable in every ointment for mange. It is the sheet anchor of the veterinary Farmer.

## Dehorning Cattle.

**EDITOR AMERICAN FARMER:** Please publish the chemicals for dehorning cattle, and the process.—J. W. PHILLIPS, Luckey, O.

The chemicals are simply caustic potash, such as can be procured in any drug store. It comes in white sticks about the size of a lead pencil. The process is begun just as soon as the horns begin to bud. The little bud is slightly moistened, and the potash rubbed on it. This destroys the germ of the horn. It is precisely the same process as that by which corns and warts are removed, and the philosophy of it the same, as horns, like corns and warts, are developments of the skin. The caustic potash process has been patented.—EDITOR AMERICAN FARMER.

## Tuberculosis in New York.

An inspection of a herd of 60 cows was made February 28 at a dairy a short distance from Avon, N. Y., by a staff of surgeons of the State Board of Health, and was witnessed by Dr. Hinckley, Chief United States Veterinary Inspector for Western New York, and Dr. Thorburn, United States Bacteriologist for the same district. Nine cattle were condemned as suffering from tuberculosis, four of which occupied adjoining stanchions, thus bearing out the theory that tuberculosis is infectious. A thorough inspection will be made of other herds in this section.

## To Keep Weevils from Grain.

Bisulphide of carbon is one of the worst smelling chemicals there are. A new use for it has been discovered which ought to make it very popular and of large consumption. The peculiar and highly inflammable gas evolved from this powerful and volatile fluid has a downward as well as an upward tendency, a circumstance which renders its use for the destruction of weevils, insects of all kinds, vermin, etc., of the highest practical utility.

An experiment was recently made in the following manner: A small bottle of the fluid, about one pound, was placed on the floor of an empty 1,000-bushel bin, with a small piece of muslin cloth placed loosely on top of the bottle instead of a cork; over all was placed a broken box so as to protect the bottle from being upset or broken, and then the bin was filled to its utmost capacity with corn. On the top of the pile another bottle was placed having the same arrangement as the one buried beneath the grain.

The result was highly satisfactory. The live weevils admitted from the field while housing the grain were utterly destroyed, and none further appeared. A thousand bushels of corn were in this case protected from weevils and vermin of all kinds, rats and mice fleeing precipitately from the deadly odor of the bisulphide, for a very trifling cost. It is estimated that the loss to farmers through the destructive methods of the weevils alone last year amounted to \$1,000,000.

## SHEEP AND WOOL.

The Merino as the World's Mutton Sheep.

The mutton Merino sheep is not a fat. It stands as a fact, notwithstanding all the criticisms, oppositions, and comparisons. The Merinos of Australasia furnish the great bulk of frozen mutton eaten in England. The Merinos of South America are the basis of competition in frozen mutton by European Nations so dredged by Australians just now. The Montana Merino sheep are good enough for export to the London market. The fat muttons of Texas are the Summer dependence of the St. Louis and other Northern markets. The range Merino ewes are always in demand to give vigor and development to the crosses with English breeds. The Merino ewe bred to a Down, a Longwool, or almost any ram, furnished "the Spring lamb" that catches the early market and the fancy prices. When wool was all that was wanted, the Merino filled the bill. When mutton was sought for the Merino met the question heartily and readily, and gave a more valuable fleece to boot. It was said by some that the Merino was too small for mutton, but the Merino size is found to be exactly what is wanted by the consumers, and so compelled mutton raisers to modify the sizes of carcasses to a Merino standard or be beaten in the markets.

The Merino sheep show at Chicago was an eye opener to all men, whether they wanted to see or not. The various types of Merinos—types the results of conditions that register associations could not control nor confine to the standards laid down in books though prescribed by resolutions and registration committees. It was found that Vermont had a type, New York had a type, Pennsylvania, Ohio, Michigan, Illinois, Missouri, and Kansas had each types that the books were unable to exactly define. There is only one parallel in sheep raising with which to compare Merino sheep as we find them now, and that is with the Down sheep of England. The Southdown and the whole list to Oxford show, and for the same reasons, what is coming in the type of the Merino sheep in America. We used to hear of Hammond Merinos and Rich Merinos, and as the developments went on, we hear of McDowell, Boyden, Peck, King, Bothwell, and Shattuck Merino sheep. These are all of the same blood, but changed by nature and selection, suited to their several localities and the notions of their breeders. There were Merinos weighing from 285, 203, 175, to 80 and 100 pounds per head at their best state. Nor were these Merinos dependent upon importations of fresh blood to keep up their characteristics. They have come to stay with American farmers.

## The Future of Sheep Raising.

Let us anticipate the future of sheep husbandry of this country; will we speak of wool growing or will it be mutton growing that will be inquired after? Shall we hear of wool growers at all? Probably, they will be spoken of as the pioneers of the sheep industry in the sacred sense that the signers of the Declaration of Independence, as the Revolutionary soldiers, the patriots who bequeathed to their posterity a Government that serves as a home for the oppressed of all lands. Are they to become the relics of a glorious and beautiful past? The Wilson law (God forbid) will be a bottomless pit that many wool growers will refuse to cross whether they could or not. But will sheep raising be taken up on new lines by the present flock owners? Will we hear of Ohio mutton raisers, Texas mutton raisers and Montana mutton growers? What about wool prices? The picture becomes too sickening, too mortifying to be anticipated any further. The rivals of the American wool growers, the manufacturers of England, Germany, France, and the Democratic party are standing behind the Wilson Bill, and an Egyptian blackness covers the future of sheep husbandry in this country.

## How to Build up the Farm.

Is the farm running down by reason of the soil being impoverished? Is the future gloomy and discouraging to the growing-up boys? Is the fertilizer bill getting larger each year, and the crops less and less? Ah! there's the rub; but it is true. The remedy is right at hand; try sheep; feed bran and oilmeal; sow clover; study the business; encourage the boys; enlist the help and interest of the girls in the flock; dispense with fertilizers that the sheep will not live on; quit hired help; watch the comers a few years, and prosperity will come to the farm and family as sure as two and two are four. Sheep have done all this for thousands of farms, will do it more and more as they are better appreciated, and must do it for every farm in the United States. The farmer that ignores sheep as the factor of good farming will grow poorer until he dies or sells out to a new and more intelligent man, who will use flocks to restore fertility. Cattle are good for a good farm, but sheep beat all domestic animals in bringing up a poor, neglected, abused, poverty-stricken farm. If you don't believe it, just try it a little on a few acres. The cheapest fertilizers are bran, oilmeal and clover; feed them to the sheep before applying them to the land. If the sheep run over the fields they leave much of the fertility in the right place.

Thousands of farmers are growing poorer and impoverishing their land by trying to grow wheat and corn for the market in competition with the West and Northwest. To put it nearer home still, they are unable to compete with neighbors who have similar land, but by making stock raising a part of the farm system, manage to keep up the fertility of the soil.

## OUR WONDERFUL SEED OFFER.

## Northern Grown Tested Seeds.



By special arrangement with Messrs. May & Co., St. Paul, Minn., we will send, postpaid, special collections of Vegetable and Flower seeds to all who subscribe for THE AMERICAN FARMER.

These collections are put up for the exclusive use of THE AMERICAN FARMER. Many of the varieties offered are new and choice, being introduced for the first time this season, and retail at 10c., 15c., and 25c. per packet. Other sorts are standard varieties which have passed the test in all sections and proven thoroughly reliable. Please read our offers carefully.

Retail price.....\$1.00  
Packet alone to Subscribers 50c.

LADIES' COLLECTION.

Collection No. 1.  
To anyone sending us 80 cents for THE AMERICAN FARMER one year we will send this package postpaid.

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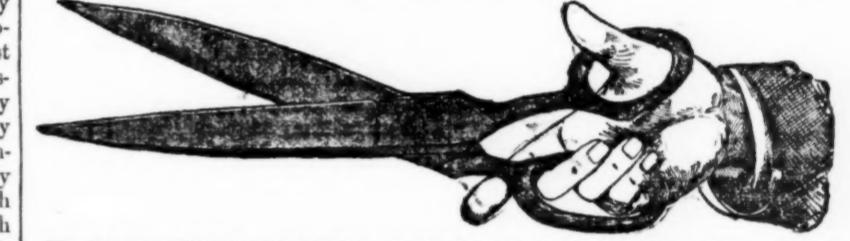
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Cucumber, Early Frame.....\$ .05  
Lettuce, Simpson.....\$ .05  
Radish, Early Minnesota.....\$ .05  
Carrot, Scarlet Horn.....\$ .05  
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Beet, Long Scarlet.....\$ .05  
Pumpkin, Emerald Gem.....\$ .05  
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Cucumber, Long Green.....\$ .05  
Peas, May's Premier.....\$ .05  
Carrot, Scarlet Horn.....\$ .05  
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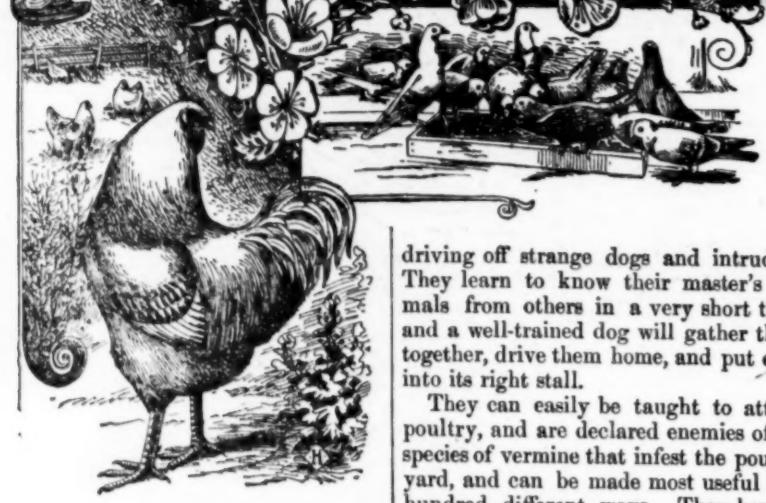
farming that shall restore the fertility of the soil and maintain it. Instead of keeping timothy meadows that annually yield one to one and a half tons per acre of hay, they can be put to clover and yield twice as much hay and of a quality much better for the flocks. Nearly every farmer knows that he manages his feeding so badly that he practically wastes all his Winter supplies without increasing the value of his animals. It might be said that one-half of the flocks aim to maintain the stock during Winter, and expect the pastures, uncertain, as we have shown, to make all the growth of his flocks and herds.

A tremendous gain can be made in feeding combination feeds, or as the Experiment stations call it "balanced rations," instead of "going it blind," hit or miss. Right here are new lessons that have to be learned, and will be learned if the American sheep raiser has the foreign wool grower as a competitor. It is the opinion of THE AMERICAN FARMER that the rich soils of this country, the industry, energy, and intelligence of farmers can, and must, overcome this disadvantage, if such really exists, by making the most of the opportunities and facilities within their reach. To illustrate: A Delaware farmer uses corn and scarlet clover for ensilage crops, growing one crop of each on the same land in one year. He got 17 tons of green corn, exclusive of the ears (which were sent to the canning factory), and 15 tons of green clover, making 32 tons from each acre of land. This to many will seem enormous, but it is readily done, and can be done year after year. It is estimated that farmers get only 60 per cent. of a corn crop when the expenses of taking care of an acre of apple orchard are included.

greater than that of an acre of wheat, while an apple orchard will yield ten bushels of apples to one bushel of wheat, it is about time fruit growers are opening their eyes and taking care of crops which

pay the largest profit. What is true of apples may also be said of other varieties of fruits. By properly spraying your fruit trees, vines and vegetable crops, you are sure of a crop, no matter what the weather conditions may be. Send 6 cents to William Stahl, Quincy, Ill., and get his catalogue of spraying outfit and complete treatise on spraying. It will pay you to do so. Mr. Stahl has been interested himself in growing

# POULTRY PIGEONS & PET STOCK!



The Pouter.

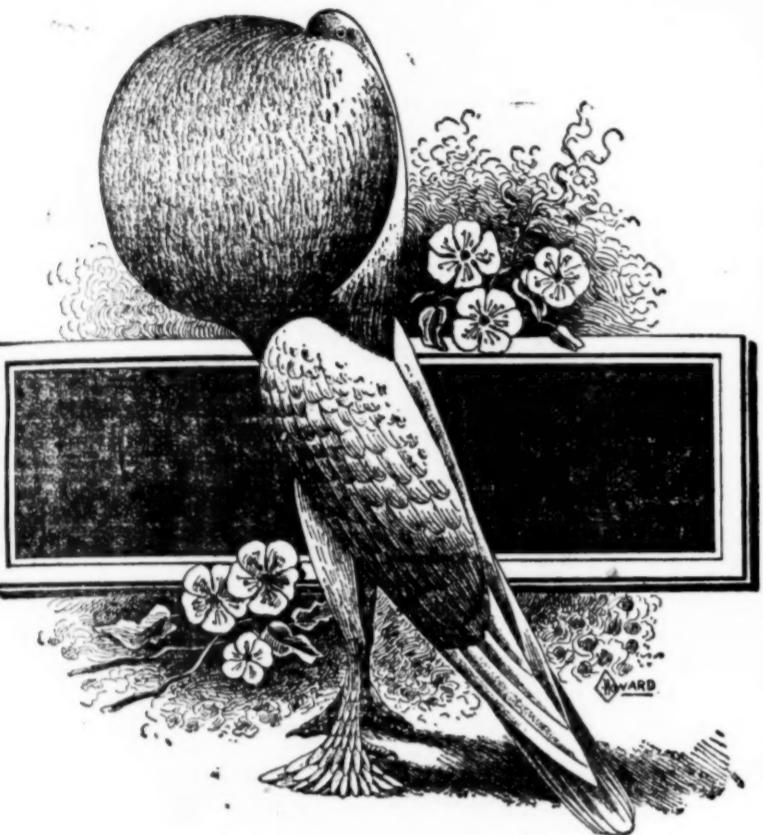
This variety has always held high rank as one of the most fascinating of pigeons, and will long continue to be regarded as one of the leading varieties. This pigeon has been most appropriately called the queen of pigeons; so graceful and gentle is it in every movement.

Much controversy has taken place

driving off strange dogs and intruders. They learn to know their master's animals from others in a very short time, and a well-trained dog will gather them together, drive them home, and put each into its right stall.

They can easily be taught to attend poultry, and are declared enemies of all species of vermin that infest the poultry yard, and can be made most useful in a hundred different ways. They have a dainty carriage and fine style, profuse, silky hair, bushy tail carried low, ears small and semi-erect, head long and sharp, chest deep, with plenty of lung room. In general form they are lithe, symmetrical, and graceful; altogether a handsome dog, and in sagacity excel all others of the dog family.

If farmers knew a Collie's usefulness



WHITE POUTER COCK.

from time to time as to the origin of the Pouter; most of the old writers considering it traceable to a cross with the Dutch or Norwich Cropper and Horsman. Be that as it may, the modern Pouter is so far removed from any of its uncertain ancestors as to constitute a very distinct variety.

Strange as it may seem, the Pouter is more extensively cultivated than any other variety by the Scottish fanciers. This has not always been the case, for many years ago London was considered the headquarters of this charming pigeon; indeed, it is still largely bred there; no other variety is so adaptable for town fanciers with limited space.

Pouters will thrive in quite small pens if kept scrupulously clean and allowed an occasional "fly" and dip in the bath. Pouters, too, are peculiarly suitable for the invalid fancier having ample time and the inclination to "pet" his birds. The Pouter is a bird that is naturally familiar, though some are particularly shy and need a lot of coaxing to get them into that "showy form," without which the best birds in the world lose much of their value in a show point of view. It will thus be seen that the Pouter needs training to make the most of all those grand properties for which it is famous. However shy at the outset of their "schooling," there are few that are not amenable to kindly treatment.

To train a bird successfully it should be handled frequently, but gently. Not driven about the loft in the most uncerebral manner, and caught ditto. Next, it should be confined in a roomy pen for a few hours daily, and fed frequently with some little delicacy, such as a few grains of hemp or millet. By adopting this plan the bird will soon become accustomed to associate your approach with the dainty feed, and thus familiarity will by degrees become established.

Various expedients are resorted to by Pouter fanciers to attract the birds' attention and thus develop the extension of crop and graceful carriage so much required. For instance, sometimes an imitation of the bird's voice will be successful, or a snap of the fingers, accompanied in each case by the sight of a bird of the opposite sex, will bring into play the attributes just mentioned. To exhibit a bird that has not been prepared for the show pen by some such training as indicated, is equivalent to courting defeat. Indeed, a bird that has been trained will sometimes sulk when placed in an unfamiliar position. It will readily be understood, then, that the Pouter fancier must be possessed of much patience and perseverance.

## The Rough-Coated Scotch Collie.

The purebred Scotch collie shepherd dog takes as naturally to driving stock as the pointer and setter to hunting birds. They are of a kind and affectionate disposition, and become strongly attached to their master's family. They are very watchful and always on the alert, while their intelligence is really marvelous. At one year old they are able to perform full duty herding sheep, cattle, swine, and other kinds of stock, attending them all day when necessary, keeping them together and where they belong, and

## QUESTIONS AND ANSWERS.

**Soft-Shelled Eggs.**—My hens very often lay soft-shelled eggs. Can you tell me the cause? I breed Barred Plymouth Rocks and Light Brahmans.—G. H., New Hope, Pa.

The hens are too fat, probably caused by feeding too much grain, especially corn or cornmeal. Hens of these breeds become fat quickly, and should be fed green food and bonemeal, or lean meat. Make them work for the grain they consume by throwing it among hay or straw.

## Bronze Turkeys.

This variety of turkeys is the largest, hardiest, best and most popular in existence. Their plumage is a rich, metallic bronze that glistens in the sunshine like burnished gold. They are very prolific, mature earlier, and attain greater weights at any given age than any other known breed. As a proof of their popularity, it is safe to say that there are more Bronze Turkeys bred throughout the country than all other varieties combined.

Could I impress upon the mind of the general farmer the importance of this branch of the industry, there would be



BRONZE TURKEY.

many more homes made beautiful and tasty, where now is lacking the means with which to do this. There is no branch of poultry raising where one can realize more from the capital invested. To raise turkeys successfully and for the most profit, the writer has one method to suggest, which may be of some benefit to the readers of THE AMERICAN FARMER: After procuring the best of stock from which to breed, it is quite essential to allow the turkeys to hatch early and care for their young, giving them the full range of the field and forest, (it being a well-known fact that this is nature's home for the turkey), instead of confining them to the lawn or around the back door.

Turkeys reared where plenty of range is allowed them are more vigorous and hardy than if grown in any other manner.

As an illustration of what can be done in the raising of Bronze Turkeys, I desire to call attention to the following: One of my neighbors purchased a trio last Spring at a cost of \$12. From this trio he raised during the past year 70 young turkeys, which averaged him \$1.75 each at market price. Counting cost of feeding them at \$30 (which is a high estimate), and first cost of the trio at \$12, it leaves him a net balance of \$80.50, and he still has the original stock.

It may be said that the foregoing is an exceptional case, but others, with push and enterprise, can do as well. The \$1.75 was simply the market price of each turkey, or the common average price during the past two years. However, there is another branch of the business by which you can realize much more, if you are in a position to carry the stock for breeders while the Winter sales are in progress, as there is not a breeder of Bronze Turkeys in the country who can supply the demand for choice and desirable stock. We will say,

## THE APIARY.

### Humming.

The best shipping crates for honey are of a single tier, and hold from 12 to 24 pounds.

Beeswax will be darkened if melted in an iron vessel. It is better to use brass or copper vessels.

Young bees are valuable in the Spring, and none should be allowed to die from carelessness.

Basswood is light, white, and free from gumminess. Nothing so far has been found to equal it for making pound sections.

Dadant has asserted that bees cannot bite. They can catch hold of a fiber and pull it out, but he thinks they could no more bite the surface of a grape than a man could bite a piece out of a plastered wall.

Open the hives only when it is warm enough for the bees to fly, and then do not leave open any longer than necessary. The brood may be chilled, and as there is no honey to be gathered, the bees may take to robbing.

Apiarists cannot be too particular about packing. It is stated that dishonesty here is as common as among horticulturists, and that fine white combs are frequently found next to the glass, and the dark in the center of the crate.

During the Winter some bees will die in the hive. When warm weather comes all dirt should be removed from the floor, and not left to form a breeding place for the moth miller. See that the bees have a good supply of honey and a good queen.

First grade crates of honey should have all the sections well filled, and the combs should be straight and of even thickness. When this is the case, all cells sealed, honey of uniform color, and the wood and comb unsouled, the article may be marked "No. 1," or "Fancy."

A dry comb, or one full of honey, is as good as a division board. Space around the edge of a frame counts but little. Bees between the combs on the outside of the cluster keep the heat in. The comb on the outside of the cluster, and with which the bees are in contact, is a better non-conductor of heat than an inch board.

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It is an old notion to clean up the hives in March and investigate as to the condition of the colonies. But the handling of bees in early Spring is now looked on as wrong. It stirs them to activity, and they may start to raising brood which will perish in the first cold snap; or perhaps they will fly from the hive and become chilled and die. If the hives are in the cellar, do not let the first warm days tempt you to remove them.

A small tract of land, say 10 acres, put to the full extent of its capacity for yielding any given product, is far more profitable than 40 acres treated in the old manner of farming. Our public domains are being too rapidly exhausted. These lands with proper culture will produce sixfold of our present products and give us more light on scientific methods of farming.

Queens cells are not built nor queen reared from October to the following May. For queen rearing, warm or hot weather is necessary as well as plenty of bees and forage. A frame containing clean brood comb that has been used once or twice for brood rearing should be placed in the center of the brood nest, in order to obtain eggs for queens. In three and a half or four days there will be eggs and larva sufficiently developed for starting queen cells.

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A Swarm Question.

EDITOR AMERICAN FARMER: I would like you, if you can find space, to inform me how to keep my bees from swarming. I do not wish to have any increase in number of swarms, as I cannot find time to tend many. Last year I thought I would cut out all the queen cells to prevent swarming, but I found it took more time to cut the cells out than it would to have let them swarm, as I had to go over them three or four times, and then I had three or four swarms issue.

Is there any other way to prevent swarming than this, besides extracting?

I am using pound sections only for surplus honey. Bees did well here last year.—ALBERT JOHNSON, Black Earth, Wis.

SWARMING.

How to Prevent and Manage Swarms.

EDITOR AMERICAN FARMER: We beekeepers met in our annual conclave, and we discussed the subject of swarming pretty thoroughly, so I take the liberty of writing out the consensus of our views and experience, without attempting to give each speaker's remarks.

The cause of swarming are chiefly overcrowding and heat. The queen having occupied every cell available and not already filled with honey, is out of a job, and straightway the workers begin building queen cells and prepare for swarming. When the impulse to swarm takes possession of a colony, the beekeeper usually can do little to prevent the swarm issuing when they get ready to swarm. Under these circumstances the best he can do for them is to give them more room, by placing empty combs in the hive. If queen cells have been started, cut them out.

A good plan, and one that has been

quite successful, is to place a super on the hive, fill it with frames filled with sections, and in the middle of the super hang a frame of brood. The bees will generally give up the notion of swarming. If the impulse to swarm is caused by heat, as it may be from exposure of the hive to the direct rays of the midday sun, shade will speedily relieve the trouble and the bees will resume work.

The question was asked, "Is it desirable to have bees swarm?" Those who wish to increase the number of their stocks should let their bees swarm. Those who desire the greatest yield of honey from the smallest number of colonies will try to control swarming and keep them strong in bees and as few colonies as possible. When they swarm, bring them back from whence they came. So the answer depends upon the need of the beekeeper, and he will manage accordingly.

How shall we manage swarming? This is an important point especially, to the novice. Before the exigency arises, and before the air is filled with the loud hum of the issuing swarm, the prudent beekeeper will have ready for use new hives, combs or frames filled with foundation, a smoker, bee veil, a swarm catcher, a sheet to spread before the hive, etc. Having these paraphernalia in readiness he is prepared to catch the new swarm when it clusters upon a convenient branch and convey it to the hive. Before the swarm has clustered fully he has prepared the hive as follows: He removes the old hive to a new stand and places an empty hive upon the old stand and fills it with empty combs or frames of foundation well fastened. When ready, he catches the swarm and brings it back to the old stand upon which the new hive is placed; emptying the bees upon the cloth in front, the bees run in and set to work with new energy. If there were sections on the old hive they must be brought and placed upon the new hive. The old hive, which contains nothing but the honey, brood and queen cells, will hatch out the young queens and in the course of a week or 10 days will have a laying queen and will do good work. This plan is now the most popular among progressive beekeepers, and, as a rule, is more profitable than dividing for increase.—J. W. VANCE.

A dry comb, or one full of honey, is as good as a division board. Space around the edge of a frame counts but little. Bees between the combs on the outside of the cluster keep the heat in. The comb on the outside of the cluster, and with which the bees are in contact, is a better non-conductor of heat than an inch board.

Open the hives only when it is warm enough for the bees to fly, and then do not leave open any longer than necessary. The brood may be chilled, and as there is no honey to be gathered, the bees may take to robbing.

EDITOR AMERICAN FARMER: While the papers tell us of stock perishing in the blizzards of the Northwest, and thousands of unemployed starving in the great cities East and West, we in the Land of Flowers, basking in the sunshine of perpetual Spring and Summer, feel but little of distress and hard times, as compared with other sections of our country.

It is true, our fruit and vegetables sell for less than usual, but when we consider the low price of flour and other articles we have to buy, the difference is not much after all. In our lovely climate, where we can plant something every month in the year and always have something growing, and stock-horses, cattle, hogs, and sheep—can live and keep fat the year around without feed, our people can make almost their entire living at home, and be independent of the rest of the world.

We have known the country from Canada to Mexico during the past 30 years, and have never seen any country that will compare with this for health.

We challenge the whole United States to show a lower rate of mortality than Manatee County, Fla. Many of those who die here are invalids from the North, who come to spend the Winter.

Once in the past 10 years yellow fever

visited this coast in a mild form,

the mortality not exceeding eight per cent;

but with our present excellent quarantine laws and State Board of Health, we have no fear of another epidemic. In our rich hummocks and along our large rivers we have some malarial fevers, which are almost unknown in the high pine lands a few miles back from the coast.

A writer from west Florida some

months ago gave an awful account of the swarms of mosquitoes which infested that region. Now this condition may be found in some localities in any State in the Union, and even on the Yukon River in Alaska, during the short summer they are said to be very numerous as well as large and ferocious. But during a residence of 12 years on the upper Manatee River, we have rarely had to use a bar, and whenever we did, it was only for a few weeks in the first of our rainy season. Our climate is incomparable. We very rarely see the thermometer show 87° Fahrenheit, and only once in 12 years (1886) have we seen it as low as 26°. During the present winter 32° has been the lowest. And today, Feb. 22, at 4 o'clock p. m., as we write, on the veranda of our bungalow the thermometer registers 78°, while the roses are blooming in the yard, and the golden fruit contrast beautifully with the dark-green leaves and snow-white bloom on the orange trees, while the stately banana, the camphor, and coffee trees, with the Australian silk oak, and many others, go to make up the picture of semi-tropical life.

Florida is truly the Italy of America,

with a climate superior to that of Italy,

as the narrow peninsula is constantly fanned by the balmy breezes of either gulf or ocean, making the summers delightful; while the warm waters of the gulf stream, which wash its western shore, temper the north winds in winter, and produce the tropical rains in summer.

Manatee County lies between 27° and 28° north, and with its 60 miles of sea coast with numerous bays and inlets, abounding in the finest fish and oysters, is one of the most desirable in the State.

Our summer crops are sugar cane,

rice, sweet potatoes, corn, peas, etc., while

in winter are canned all kinds of vegetables for the Northern markets.

Land is cheap and plenty, ranging from \$1.50

to \$10 per acre for high pine land, and \$25 to \$40 for hummock.

Grazing land can be had at 75 cents to \$1 from the large land companies.

Sheep and cattle thrive with very little care, and the former pay very well, as we know from an experience of 10 years, having fewer enemies and fewer diseases than in any part of the United States. No wolves, no snakes, no foot rot, and we are not scared by the Wilson Bill.

We might write much more of our

immense orange and lemon crops, of the beautiful Indian legend of Medicine Spring, the old castle, the mysterious music in the Manatee River, all of which Mr. A. E. Stibbins, of Manatee village, has written up and kindly permitted us to use.

But we have already taxed your valuable space too much, so we will close by wishing that the thousands of unemployed who are starving in the cities of the North and West could be here, where they could make an easy living independent of panics and strikes.—J. L. VANCE.

When writing mention this paper.

## A SUNNY LAND.

Free from Panic and Fear of the Wild Bill.

EDITOR AMERICAN FARMER: While the papers tell us of stock perishing in the blizzards of the Northwest, and thousands of unemployed starving in the great cities East and West, we in the Land of Flowers, basking in the sunshine of perpetual Spring and Summer, feel but little of distress and hard times, as compared with other sections of our country.

Established - - - 1819.

75TH YEAR.

## THE AMERICAN FARMER.

*"O fortunatum minimum sed si bona norint agri-  
colae."—VIRG.*

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TO ALL TO WHOM THIS PAPER  
SHALL COME.


Greeting: This paper is sent you that you may have an opportunity to see it and examine it, with a view to subscribing. We ask you to compare its contents, objects, and price with those of other papers, and see if you do not come to the conclusion that you ought to have it; that you cannot afford to do without it. We can assure you that if you send in your name for one year that you will find it one of the most profitable investments that you can make. We hope to make and keep it so interesting that you will think that every number more than repays you for the subscription price for a year. Please call your neighbor's attention to the paper.

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We will send THE AMERICAN FARMER and any other paper or magazine in the country at a reduced rate for the two. The following is a partial list of the periodicals that we club with:

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Our Little Men and Women.	1.00	1.25
Washington's Magazine.	2.50	2.50
New Englander.	50	50
Friendship's Offering.	1.00	1.25
American Gardening.	1.00	1.25
Godey's.	3.00	3.00
The Young Sportsman.	50	50

## OUR NEW CLUB OFFERS.

We have arranged to club with the Weekly Witness of New York. Its price is \$1 a year when taken alone. The Witness is a 16 page weekly paper and among its contributors Rev. Josiah Strong, D. D.; Rev. John Hall, Dr. L. D. Newell, Dr. S. M. Agar, Dr. D. R. Theo. L. Clarke, D. D.; Rev. Mr. C. Lockwood, D. D., of Cincinnati; our own weekly sermon by Dr. Talmage; Sunday school lesson by Dr. George F. Pentecost, etc. It is one of the strongest and most popular family newspapers published.

The Witness and THE AMERICAN FARMER will be sent to any address for one year postpaid for the small sum of \$1.20 for both publications.

Sabbath Reading is a 16 page weekly paper, non-political, non-sectarian, no secular news. Determined not to know anything among you save Jesus Christ." Good, not goody. Religious not dull. Contains Sunday school lesson; Christian Endeavor Topic; Sermons; Stories; Live Reports of City Missions. Sixteen pages filled with the best Christian thoughts of the age. Sabbath Reading alone costs 50 cents a year, but we have made an arrangement with its publishers so that we can send both it and THE AMERICAN FARMER, postpaid, to my address for one year for only 25 cents.

At Home and Abroad, the leading musical monthly publication of New York City, will be sent one year with THE AMERICAN FARMER, for \$1.10, both papers postpaid. Every number of At Home and Abroad contains a collection of vocal and instrumental music that could not be bought separately in sheet form in the stores for less than 70 cents. Remember, that by our arrangement 12 numbers of this publication and THE AMERICAN FARMER for one year for only \$1.10.

These offers are open to all subscribers in connection with THE AMERICAN FARMER. Neither the Weekly Witness, Sabbath Reading, nor At Home and Abroad can be furnished us without a subscription to THE AMERICAN FARMER for one year accompanying the order.

HAVE all your neighbors see THE AMERICAN FARMER and read it. Ask them to subscribe and help it in its great fight for farmers' rights. The more subscribers it has the better fight it can make. Send us the names of your neighbors who you think ought to see the paper. We shall be glad to send them sample copies.

SIGHTS AND SCENES  
OF THE WORLD.

Part 2. Number 7.

NUMBERS CHANGED EVERY ISSUE.

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There is no magic—no inscrutable mystery about political economy.

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It is nonsense to beg so plain a subject with recidite terms, obscure jargon, and metaphysical theories.

Political economy has been aptly described as "the science of enlightened self-interest."

It is not philanthropy, it is not religion, it is not benevolence, it is not necessarily politics.

We raise hundreds of millions of bushels of wheat, corn, and oats to sell in England at what is really much less than the cost of production, when we take into account the value of the fertilizers they have abstracted from the soil. On the other hand, we buy about every year \$300,000,000 worth of sugar, potatoes, barley, wool, fruits, butter, cheese, eggs, etc., which should come from our own soil.

To the man of common sense this looks like wicked economic suicide.

We begin by encouraging the individual to do the best possible for himself.

If every man will do this in an intelligent, well-directed way, the communities in which he and others like him live will prosper, and, therefore, the whole country. Political economy, therefore, begins with the individual. That country alone is prosperous, and most prosperous, in which the greatest number of individuals are prosperous.

Scientifically and actually, it is vastly better that in every community of 5,000 souls there should be 1,000 men who each make \$1,000 a year, than that each of these make only \$250, while one man makes \$100,000. This is true political economy.

The United States contain 70,000,000 people. These are naturally dependent on each other. Nearly the whole of their livelihood is gained by supplying each other with the necessities of life. The main object of all Government is, after affording security to life and property, to facilitate and encourage the exchange of different kinds of products among the various kinds of producers constituting its population. It is its duty to see that, to the greatest extent possible, its own people supply each other with what is needed. This for three reasons:

1. That the money be retained in the country for the use of all the people in the country.

2. That the greatest amount of employment be given to all the inhabitants, and therefore each individual get the highest possible share of prosperity.

3. That its people may to the greatest extent be rendered independent of other countries.

As we have said before, this is simply the extension to National matters of the sound rules of thrift and business governing the conduct of families, farms, and business houses.

Each family, farm, and business house strives, and should strive, to keep as much as possible of the money it gains for itself by producing as much as is practicable of what it consumes; what it buys outside it should make an effort to get of its neighbors who buy of it, so as to make trade reciprocal, and to enable all to get as much as possible of each other's products, waste the least by long transportation, and keep the money, the medium of trade, as near home as possible. So we go from the little local community to the larger commercial divisions, and from them to the Nation as a whole.

A little inland community, let us say, in Georgia or Alabama, ought to strive to produce all that it can, reasonably and profitably, of what it needs. That which it cannot produce it should get from its nearest neighbors who do produce it, and so on until it reaches the commercial centers of its section—Savannah, Atlanta, Mobile, etc., and from them to the commercial centers of the whole Nation.

So that if that little community will do the best it can for itself and for its own people, it will contribute to the prosperity of the whole country. The prosperity of the whole is made up of that of the different parts.

This brings us to the common sense of protection to farming. The prosperity of the farmers is the basis of that of the whole country. It cannot be otherwise.

The manufacturers and merchants cannot sell more than the farmers are able to buy. Foreign trade for manufacturers is still a good way off. It will have to be valiantly fought for against the fierce competition of English, Belgium, French and German manufacturers. Ours must, therefore, continue to rely for their support upon our own farmers.

What reliance can they have if the farmers are reduced to poverty by foreign competition? What will become of manufacturers and merchants when their customers are deprived of the means wherewith to buy?

Are not these being reduced to poverty,

and deprived of the means wherewith to buy?

No man can successfully deny that the present tendency is to the direct impoverishment of the farmers of the United States.

They are being encouraged to devote themselves to raising articles upon which there is the smallest margin of profit, and which when exported are sold at an actual loss, while at least one-fifth of all the money in the country is sent abroad every year to buy agricultural products that should be produced on our own soil.

In 1890 the duty was raised to 25 cents a bushel.

This reduced the imports in 1891 to 5,401,912 bushels, valued at \$2,797,927, and in 1892 to only 186,871 bushels, valued at \$186,000.

Few farmers appreciate the immensity of the importations of foreign potatoes.

In the years preceding 1890, when the duty was 15 cents a bushel, we imported annually 8,788,308 bushels of potatoes, valued at \$4,656,308.

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This reduced the imports in 1891 to 5,401,912 bushels, valued at \$2,797,927, and in 1892 to only 186,871 bushels, valued at \$186,000.

But the prices of agricultural produce in Europe have been so low during the past season, that the farmers there felt that they could afford to sell potatoes in this country in spite of the high duty, and the result is that between Oct. 1 and Feb. 10 there have been received at the port of New York alone, 215,965 sacks and barrels of potatoes, or three-eighths of all the supply of the city. In the week Feb. 10-17 three steamers alone brought to New York 37,000 sacks of English and Scotch potatoes.

A little analysis will show how greedy the English and Scotch farmers are to sell in this market. A sack of English magnums weighing 168 pounds sells in New York at \$1.70, and has been sold as low as \$1.50. The following has to be deducted from the selling price:

Duty, at 25 cents a bushel.....

Freight, 20 cents per bushel.....

Commission, 15 cents per bag.....

Freight to shipping port abroad.....

Transfer to steamer, broker, etc.....

Total.....

Leaving for English farmers only.....

Total.....

Total.....

This does not take into account the profit of the go-betweens who have bought the potatoes of the farmers.

English and Scotch magnums" are advertised for sale by every grocer in Washington, and they probably find their way much farther West and South.

The report of the Statistician of the Agricultural Department gives the average production of potatoes in the United States for the 10 years preceding 1890 as 87.7 bushels per acre, and 76.3 bushels for the nine years from 1880 to 1888. In 1893 the yield was 72.2 bushels per acre.

If we assume an average production of 80 bushels to the acre, we will see that the importation of 8,788,308 bushels a year prior to 1890 took away from our own farmers the market for the product of more than 100,000 acres of the best farming land in the country, and it took away work, wages, and profits from at least a quarter of a million farmers, who would otherwise have been engaged in raising these staples for our home markets. Still worse, it fixed the prices at which the whole of the 200,000,000 bushels raised in the country were sold.

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## THE GREATER CONGRESS.

Farmers Discuss the Topics Which Interest Them.

**EDITOR AMERICAN FARMER:** I can cheerfully say I do not know of any paper published in any State which surpasses THE AMERICAN FARMER in the excellence of its information. The unanswerable arguments for the protection of the farmer's interests should be in every home in the land, for without protection the home of the American farmer, mechanic and laborer will become an almshouse, prosperity will be impeded, and the destruction of every American industry assured.

Yesterday hundreds of men marched through the streets of Salt Lake asking for work—not bread of charity. When it is known that in Utah the people feel the distress less than in any other State in the Union, that more people own their own homes here than in any other State, the amount of poverty, distress, and suffering in other States can be appreciated. If free lead passes the Senate, as it did the House, the absolute destruction and closing up of every mine in Utah, and the consequent discharge of every miner now employed, is assured. —CHAS. CRANE, Salt Lake City, Utah.

**EDITOR AMERICAN FARMER:** I see no valid reason why the farmer should not be protected, if other classes of manufacturers are. I agree with Joseph Herr that the men who cultivate the Genesee farms are manufacturers. I believe in protecting home industry. The opposite policy is now working to the detriment of agriculture. I am strongly opposed to a policy which protects other industries to the injury of that in which I am engaged. The Republican party commenced this bad work by taking the duty off hides. I am inclined to think that reciprocity properly carried out would be a great help to the farmers of this country, but I don't think it wise to raise land values, as some high tariff advocates urge. But if land values continue to decline for the next 15 years as they have for the last 15, there will not be much left. I do not consider this probably, however, even under free trade, as we have already suffered quite as much as we likely to in the decline of land values. I am not frightened at the prospect of taking off the duties on many highly protected articles.—E. P. TOMLINSON, Rosenthal, N. Y.

mos sum of \$1,275,000,000 escapes taxation in New York City? If the tax rate on this money be only one per cent, there would be the sum of \$12,750,000 more taxes collected.

If this is not a gigantic wholesale robbery of the masses of New York City, then let us know just what it is. Yet we are told that "the State of New York has probably the best-executed tax laws of any State in the Nation, except Massachusetts." Then I pity the States, or the taxpayers of those States, that have the poorest-executed tax laws.

If the ingenuity of man cannot frame a law to compel these rich robbers to disgorge every dollar they owe the public in any equitable tax law, then it would seem that it is about time that American tax payers took these gentry in hand and taught them the first lesson in our National politics; viz., that it is every man's duty to be a law-abiding citizen, and this they are not unless they pay their taxes, as well as fulfill the other duties of good citizenship. If they will heed this lesson it is a duty that the loyal, true tax payers owe to themselves and the poor, that a law be framed to punish these criminals against society. The thief who steals a few dollars is hurried to a State prison.

Who is there among honest taxpayers that does not regard the rich scamp who shirks his duty by refusing to make a full schedule of all his property for taxation, as a far worse thief than the man who steals on a small scale?—J. A. GARVER, Spring Grove, Va.

**THE WOOL TARIFF.** EDITOR AMERICAN FARMER: I have received notice that my subscription has expired and hasten to renew, as I like the ring of your tariff music.

I have before me President Cleveland's message of Dec. 6, 1887, in which he says the duty on wool is from 10 to 12 cents per pound, and it leaves the farmer's hands charged with precisely that sum.

The next Spring after Mr. Cleveland's tariff message, I sold 1,705 pounds of wool at 13 cents; of course, I got at least 10 cents per pound tariff, according to Mr. Cleveland, but sold my wool rather low—low enough to suit the most fastidious free trader. Before that time I had been getting from 18 to 20 cents.

Wool is very low, and I am reducing my flock, and have about 200 head of medium grade of wool.—J. O. SLATER, Independence, Kan.

**WINES AND BRANDIES.** An Interesting Struggle Before the Senate Finance Committee.

A powerful French lobby has been laboring with the Ways and Means Committee of the House and the Finance Committee of the Senate, in favor of French wines, brandies, and fruits. This is headed by M. Brinwaut, of Chicago, the Consul-general of France to this country. Other members are M. Leon Gobet, the delegate of the Paris wine and liquor firm of Gobet and G. Knowles; formerly United States Consul in Boston, and now the agent of a syndicate of Bordelais, wine and brandy houses. They have been assisted by the New York Wine and Spirit Traders' Society, who have sent here their President, Col. Chas. McK. Losier. The result of their labors so far has been to secure a reduction in the Wilson Bill of the duty from \$2.50 to \$1.80 a proof gallon, but they want it still lower, and have been laboring with the Senate Committee to effect this. They have been resisted by the California State Viticultural Commission, which has sent here its Secretary, Mr. Charles A. Wetmore. Senator White, of California, recently appeared before the Committee, and made an able argument in favor of his constituents. He has shown to the Committee that the American tariff on spirits is lower than that of Great Britain, Canada, Australia, and many other countries, and that the proposed reduction would benefit no one except those engaged in manufacturing spurious concoctions.

Incidentally he has called the attention of the Committee to the peculiarity of the French tariff, which is what might be called a double tariff system, viz., a general high tariff against all the world, and a special or minimum tariff granted to favored countries. The United States is excluded from French markets in all items except raw material and a few unimportant exceptions. The French, however, are treated in this country on the footing of the most favored nation.

Americans buy, alcohol, raisins, nuts, etc., as well as cotton, machinery, wagons, watches, and other manufactured articles, are taxed from 20 to 50 per cent. higher than similar products of England, Germany, Switzerland, and certain other countries.

In 1891 the French grape crop was almost a failure, and a quantity of wine—\$7,000,000 worth—was imported from the United States; but this was stopped the next year by a French tariff, which discriminated strongly against United States products. After giving figures showing the remarkable fluctuations from year to year of the grape crop, Senator White said:

"It is plain to see that in articles such as wines commerce is subject to extraordinary fluctuations of prices, and that under an *ad valorem* system importations would take place principally in years of large production and be held in bond for years, if necessary, to be sold when prices rise; and those who have speculated on the former low prices can hold the markets against all future importations, because under the law the *ad valorem* rate is fixed in accordance with the value at the time of importation, and not of the time of arrival of the bond. Under such circumstances the wine trade would be at the mercy of speculators, and the revenue collected would not be in accordance with value at all. After holding such wines without tax for three years in bond the speculator would pay in accordance with the bankrupt values of surplus stocks of three years preceding, whereas the importer who would desire to bring in fresh lots of the same class of goods, which had been kept in the meantime in foreign countries, would pay many times as much tax."

\* \* \*

"There is a well-known industry in certain French ports in preparing artificial and adulterated compounds, both of wines and spirits, for such foreign markets as admit the same without care for the interests of their own citizens. Such products are forbidden to be sold in the French home market, but special facilities are afforded for selling the same in foreign markets."

The production of paper from the hops waste in breweries is being considered in Germany. The oil in the hops is a hindrance, which, it is claimed, is now overcome, and it is expected that papers can be made, by using hops, at a cost of 50 per cent. less than heretofore.

**Make Paper from Hops.** The production of paper from the hops waste in breweries is being considered in Germany. The oil in the hops is a hindrance, which, it is claimed, is now overcome, and it is expected that papers can be made, by using hops, at a cost of 50 per cent. less than heretofore.

## KANSAS FARMING.

## A Variety of Practical Subjects Discussed by Practical Men.

The annual meeting of the Nemaha County (Kan.) Farmers' Institute was held at Oneida, Jan. 17, 18, and 19.

"FRUIT GROWING,"

was presented by Mr. Avery, who for 15 years has followed the business in this County, and now has 38 varieties of apple trees in his orchard. Said he would confine his remarks principally to the apple crop, as all kinds of small fruit are known to do well. Nearly all of his 36 varieties did well for six or seven years, but later experience has led him to consider many of them, including Winesap, Missouri Pipkin, Geneva, Rambo, and most of the Russets undesirable. Recommends Duchess of Oldenburg for early apple, Maiden Blush for Fall, and for a sweet Winter apple the Kansas Sweet. This variety resembles the Ben Davis as to form and color. For general reliability, satisfaction, and profit plant Ben Davis first and all the time. Would plant at least 40 feet apart and always lean trees well to the southwest, to protect trunks from hot, afternoon sun. Favors cultivating the orchard until well grown, raising hedge crops, such as asparagus beans, or sweet corn, then stock deer to clover. Has found low headed trees as liable to sun scald as higher ones; therefore, prunes young trees about four feet. Never set young apple trees where old ones have died out; plant peach or cherry, if possible.

"CORN GROWING."

Harry Zahm read a paper on "Corn Growing." Put the land in best possible order and plant good seed at the proper time, in order to get a good stand, which is one of the main points. Favors the lister, but on rolling land would list and plow alternately. Fall plowing is excellent for listing. So list stalk ground, cultivate or disc, then list four inch deep and harrow before planting with the two-horizon planter. If dry, plant deep; if wet, plant shallow.

Pick seed corn when husking; large straight ears with small cob. Begin cultivation early with harrow or disc. Uses cutaway disc. Cultivate deep first time, then not so deep.

Col. Shinn spoke the lister. Thinks listing causes the land to wash. Wishes all the listers could be gathered together in one place and burned with fire. Thinks farmers should cultivate corn later in the season.

D. S. Coleman explained that when listed each furrow carries off its own water, a comparatively small quantity, and the danger from washing is scarcely more than in case of top planting.

Ben Schoeler recommends deep cultivation of the land followed by shallow listing, leaving top of ridge in such shape that it will collect and absorb water, instead of shedding it into the trench. Thinks listed corn is very often washed when top surface is exposed.

J. G. Fairchild says you can during a period of 10 years grow an average of 10 bushels per acre more by listing than by top planting.

President Fairchild spoke in favor of the lister, but recommends the practice of both of them.

Mr. Worley says that in growing large varieties it is a good plan to top plant a few seeds for as seed, as it will mature sooner than listed.

Mr. Robertson says he is experimenting with seed corn kept in the cellar where it will never freeze.

President Fairchild, of the State Agricultural College, delivered a fine address on the subject of

"SPECULATION ON THE FARM."

The welfare of farming demands that we put aside speculation outside of the farm. The most successful speculation is that which looks most to the development of the powers within the home.

"THE MOST PROFITABLE HOUSE TO RAISE."

Mr. Sanford read a paper by G. C. Sanford. He says study market and breed in accordance with its requirements.

Mr. Avery keeps seven varieties of chickens.

Mr. Avery keeps White Plymouth Rocks for all purposes.

Says they are more docile and better layers than the Barred Plymouth Rocks.

Recommends highly the feeding of bone meal, and says the hatchet is a sure cure for colic.

"SMALL GRAIN."

A brief, pointed paper on "Small Grain," by B. Schoeler: Plow early, not too deep.

Harrow thoroughly; no danger of getting land in too fine condition. It should be fine, but firm.

Old notion that land must be left rough to hold the snow is played out.

Now when winter comes, the ground must be left smooth, and the snow will not stick to it.

Mr. Avery says the Ben Davis is a good variety.

"SWINE FOR PROFIT."

was raised by a paper by J. A. Worley.

Use good stock. Sows well graded up, and thoroughbred male every time.

Herd liable to retrograde when young sows are used for breeders.

Don't sell off all the old ones.

Favors March pigs, as they have a good start when clover starts.

Don't attempt to grow hogs without clover pasture.

Young stock need some grain in connection with clover.

Feed shorts and bran in connection with corn.

Never let pigs get hungry, and allow no check in growth from piggish to market.

Middle of September to first of December is the best time to feed, and they should feed 250 pounds at nine months old.

Prefers May pigs to feed early to hogs by it.

Mr. Worley says the Ben Davis is a good variety.

"FARMER MEETINGS."

Gatherings of Those Who Till the Soil.

IOWA.

At the Greene County Farmers' Institute, held at Paton, Iowa, Feb. 13 and 14, 1894.

Mr. Robert Patterson read a paper on "Prospects of the Future for the Farmer."

He says the farmer that owns his land, in viewing the future in the light of the past, sees only low prices for his products.

Hired help such as he wants is hard to get and high-priced.

The price of grain is low, and he sees no money in raising grain at present prices,

and will perhaps come to the conclusion that it will pay him better to rent his farm.

The farmer that rents lands thinks he can see as he looks the future in the face, higher rents, lower prices for his products, and hired help such as he wants is hard to get and high-priced.

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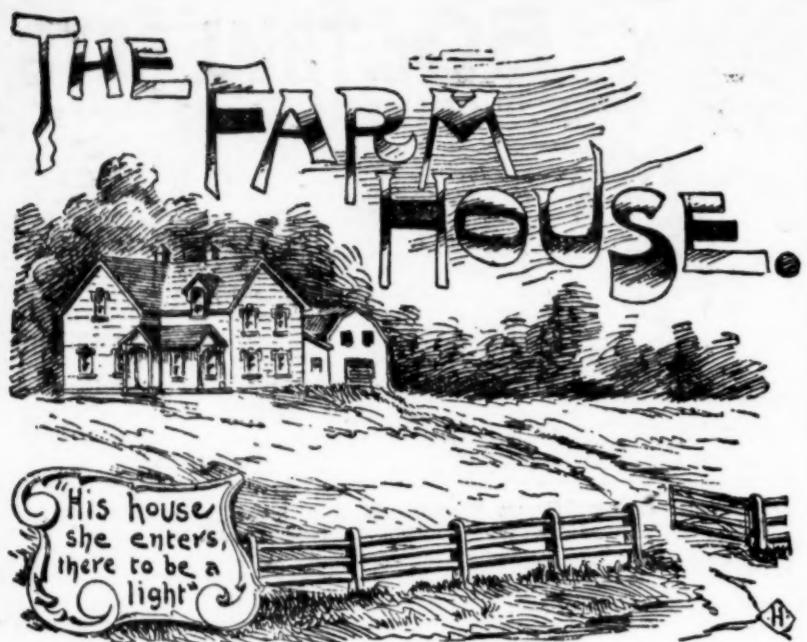
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## Be My Sweetheart.

Sweetheart, be my sweetheart  
When birds are on the wing,  
When bee and bud and babbling flood  
Begin to bring the spring;  
Come sweetheart, be my sweetheart  
And wear this posy ring!

Sweetheart, be my sweetheart  
In the meadow golden glow  
Of earth afflaid with the glorious blush  
When the sun is in the forestbow;

Dear sweetheart, be my sweetheart,  
As into the moon we go!

Sweetheart, be my sweetheart  
When falls the bounteous year,  
When fruit and wine of tree and vine  
Gladly we taste;

O sweetheart, be my sweetheart,  
For winter it draweth near,

Sweetheart, be my sweetheart  
When the year is white and old,  
When the fire of your love is spent, forsooth,  
And you are aged and gray;

Yet, sweetheart, be my sweetheart  
Till the year of our love be told!

—*Ladies' Home Journal.*

## About Women.

MISS WILKINSON, a landscape gardener of the Metropolitan Public Gardens Association of London, England, is now engaged in laying out St. Mary's Park, Woolwich, and Victoria Park Cemetery. Miss Wilkinson's services are much in request by municipal authorities in England.

\* \* \*

CHICAGO now has a woman engineer, who has successfully passed the ordeal of a rigid examination. A contemporary says she was not let off easily, either, because she was a woman; in fact, the writer says her examination was, if anything, a little more severe than usual. The young woman walked into the Board of Examiners' room in the City Hall, presented her application in a manly way, deposited the official fee (\$2), and then made her way into the line of the applicants to await her turn.

When the examination was finished, the examiners wrote at the end of her paper "Accepted," and Miss De Barr is now a full-fledged licensed steam engineer.

\* \* \*

AT THE last meeting of the New England Woman's Club, a memorial tribute was given to Miss Elizabeth Peabody, who was greatly interested in the club, and a personal friend of many of its members.

The President, Mrs. Julia Ward Howe, spoke in loving terms of Miss Peabody's great humanity, her charity, and, above all, her hopefulness and unselfishness. Other speakers, who spoke in eulogy, were Mr. Thomas Cushing, Mrs. Ednah D. Cheney and Mr. Barnard, a lifelong friend. An additional pleasant feature was the loan of a portrait of Miss Peabody. This hung on the wall, and was decorated with a mass of laurel.

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MISS ALLEGRA EGGLESTON, daughter of Edward Eggleston, is at work this year illustrating the "Life of Benjamin Franklin," in the Delights of History Series. "The Life of Columbus" and the "Life of Washington" of this series are illustrated by her. Miss Eggleston has been devoted to art since, at the age of six, she carved a bit of wood with a case knife into a semblance of an idol which, with a small picture of Miss Harriet Hosmer, she tenderly treasured and dreamed over. She made her first reputation as an artist in wood carving, of which the exquisite bas-relief portrait of Dr. J. G. Holland, in the memorial mantelpiece that now stands in the Century editorial rooms, is an example. She has been abroad three times, and is now planning to go over to Paris for more serious study.

## Near to Every Woman.

One of the subjects that comes up for the most frequent discussion is, "What shall we do with our girls?"

From time to time this has been touched upon in the columns of the Farmhouse, but numerous letters recently received have thrust the question again upon our attention.

One mother writes from the Pacific Slope and asks what she is to do with a girl who is 18 who wants to leave home and go into the city. This daughter has an academic education, but is fitted for no special line of work.

What would we do? If you are in comfortable circumstances, as you lead one to infer, keep her at home. If she is of "average or superior intelligence," there must be some one thing in which she can learn to excel. It is your duty as a mother to look for this especial adaptability and do all in your power to cultivate it to usefulness. We quote from a former article written for the Farmhouse upon this same theme:

Some of the more thoughtful Americans deplore the fact that so many of our farmers' daughters look upon it as the height of their ambition to learn stenography or bookkeeping or typewriting, and leave the farm for a city life. It is one of the greatest menaces to our country to-day. Home ties are severed, and in fierce competition of our great cities it is well nigh impossible to keep actual necessities of life. They may not succeed; and, too proud to go home, they look forward, as

cidedly ultra, and may not find general favor.

Finally, there is the redingote overskirt, and it takes no prophet or daughter of a prophet to foretell that this graceful, genteel fashion is bound to become popular. Its revers will be sharply pointed, according to the new Robespierre model; its lining will be silk and sumptuous, and its decorations will be of fur, braiding or guimp, modestly arranged. It possesses the unusual advantage of being becoming to both stout and slim figures.

The greatest lesson that woman has yet to learn is to think before she speaks. In comparison with the thoughtless tongue, the pen in a woman's hand is as harmless as a dove.

A pretty flower design, a monogram, or the initials may be embroidered or painted on the front part.

**SLIPPER CASE.**  
Cut a shield-shaped piece of pasteboard 16 inches long by 12 inches wide. Cover the front part with plush or velvet, and the back with cambric. Cut two pieces of pasteboard the proper shape for the front part, and cover just like the back. Then join them to the back, neatly rounding them at the top so there will be room for the slipper. A narrow quilting of ribbon should be put on all around the edges, and sew ribbons on both the upper corners holding it up.

A pretty flower design, a monogram, or the initials may be embroidered or painted on the front part.

**PAPER HOLDER.**

Cut two boards such as dress goods are wrapped on. One should be about three inches wider than the other. Saw them the desired length. For end pieces cut two pieces of leather so that they will be three inches wide across the top and one inch at the bottom. They should be as long as the widest piece of board, which should be the back of your paper holder. Fasten the edges of the leather to the boards with brass-headed tacks. Stain both boards walnut, or cherry color, or paint them black, then varnish. Put two screw eyes in the top of the widest board, upon each of the ends, and tie cord in them to hang it up.—MARY.

**Arrangement of a Room.**

There should be rhythm to a room. It should be like music and should express what is in the mind of the one who arranged it. Of course, with a great multitude of housekeepers this can only be done imperfectly. There is the old rocking chair. Is there any greater boon to tired mother than a big, old-fashioned rocking-chair? She has learned to love the very scratches on it. But somehow it seems to haunt her by reason of the fact that it doesn't look as nice as the new one down at the store. Meanwhile the old rocking-chair remains as unattractive as ever.

But the day comes when the idea begins to impress itself upon her that white enamel paint and gilding and a gray-green velvet cushion will transform the chair into the quaintest, most charming one imaginable, and the new gown is selected from a trifle cheaper goods, and the chair becomes a substantial fact. I wonder if anyone ever did such a thing as that?

Well, well, they say that when a woman really and seriously wants anything she can contrive to get it. Upon that point I am not certain, but surely there is one thing that can be done, and that is to arrange things. Some people who have really beautiful furniture do not know how to arrange it to any advantage. One should find out just how high the window shade must be to soften the light that falls across the choicest picture; should observe what articles can stand a strong light, and what ones most require a corner which will be charitable to their defects and shortcomings. Nor should the time be considered wasted, even if the idea grows upon one, as it is sure to do after a few triumphs had been achieved.

One rule which a writer recommends, is that when one enters a room nothing should attract attention by undue prominence. A second rule is that every article in the room should have an object, if possible, for being there.

**Kitchen Steam is Bad.**

Specialists on throat diseases are beginning to take unusual interest in culinary methods. They advise a kitchen quarantine on wash days and boiled dinner day, giving as a reason that the steam from boiling clothes and pickled meats that require much heat produces many illnesses of the respiratory organs and aggravates slight or chronic diseases of the nose, throat and lungs. Patients are advised to vacate apartments having dark or ill-ventilated kitchens, and to keep all babies and ailing children out of the kitchen when cooking is going on.

**To Clean Carpets.**

To restore a faded or soiled carpet to its original luster, first beat thoroughly and then apply the following mixture: Shave a pound of curd soap into a saucepan, adding two quarts of water; simmer until dissolved, add a couple of ounces of salts of tartar, and mix thoroughly; rub the carpet thoroughly with it; then rub with cold water and then with coarse, dry cloths.

**Very Exact.**

A woman visiting in Ireland was delighted with a certain hot cake served at breakfast. From the native cook of her hostess she duly got the recipe: "You must take more than you'd think of flour, ma'am, just what you'd know of butter, the slightest taste in life of baking powder and the fill of the small jug of milk."

**Aluminum in Dressmaking.**

The French couturiers are somewhat in advance of the American dressmaker in making aluminum perform its duty in the modern gown, says *Hardware*. They place in the bottom of the skirt, about two inches above the hem, a hoop of that metal, perfectly supple, and of course extremely light. It is concealed by a ribbon matching the color of the lining to the dress. It is the best material made up in this manner to use for the purpose of making the skirt hang well and gracefully, and its adoption is a tribute to the shrewdness of the foreign dressmaker.

**Cheapest Lands in the World.**

Considering the quick cultivation, varied productions of high quality, and practically no time from the great markets of Chicago, Milwaukee, Detroit, etc., are in the famous fruit belt of Michigan, along the eastern shore of Lake Michigan. A populated region with schools, churches, railroads, steamboat lines, telegraphs. Millions of people to buy all fruit, vegetables, garden truck as fast as it grows, and transportation ready, quick and cheap enough to get it to them. \$5 to \$20 per acre. Write to B. F. Popple, G. E. Act. C. & W. M. R. Y., 875 B'way, New York, or West Mich. Land Co., Muskegon, Mich. Mention this paper.

**PRETTY WORK BASKET.**

A work basket can be crocheted of coarse knitting cotton. Make it the same shape of the article you wish to use for a mold, and just large enough to fit over it. A brown baking dish of pretty shape, or a small, rather deep pan, will answer the purpose. The crocheted pattern should be close except at the edge, where it should be open. It is much prettier if spaces are left to allow narrow ribbons. Start a stiffened edge after stretching it upon the dish, place it in the oven to dry. When taken from the oven remove the crocheted work from the dish, when it will be found to

be perfectly molded. Have some shellac ready and varnish the basket with it. Then the ribbon should be woven in and out of the spaces left for it, and where the ends meet tie a pretty bow. The basket may be lined or not, as you prefer.

**Housekeeping; or, What is the Difference?**

No careful observer has failed to be impressed with the fact that there are some women who will make an orderly, comfortable and homelike place out of the most unpromising material which circumstances may assign them; and, on the other hand, there are those with fine ability, multiplied conveniences, and unlimited means who extend the domain of waste and disorder, and make the daily abode anything but pleasant and homelike. What makes the difference? We are accustomed to say that it is "natural ability," and that no amount of study or training will very much help the matter; just as we formerly thought that the fine arts—music, drawing, etc.—belonged of birthright to the comparatively few. But it is demonstrable that the individual who cannot sing, draw or play the piano is the exception, not the rule. Why not, then, as well believe that the art of housekeeping belongs to every wife and mother, and settle the question at once by turning our attention to it with a real determination to solve its problems and master its difficulties as we would those of any other science, and no longer lay our mistakes and failures to exchange to our mothers, grandmothers, and great-grandmothers.

It is hoped that this department will be of the greatest good to all interested in the work of helping each other. It must not be understood as a medium of advertising for sale the goods of any one; but if Mrs. K. of Nebraska, has 20 pieced blocks that she does not need, and wishes to exchange them for five yards of inch and a half edging crocheted of No. 36 white thread, she may state so briefly in a letter to the Farmhouse, and it will be published, with her full address, in the Exchange.

If Mrs. M. of Connecticut, wishes to make the exchange, she immediately opens correspondence with Mrs. K. on the subject, and here the Exchange drops the matter. And so on with books and birds, and pictures and plants, seeds, and anything that one housekeeper may have that she is willing to give in exchange for some one thing.

**EXCHANGE.**

**A Departure.**

For the greater convenience of our readers of the Farmhouse, it has been decided by the editor that a new department must be started including a wide range of subjects.

It is to be known as the Farmhouse Exchange, and is open to all subscribers' families, and especially to the contributors to Women's Wisdom.

It is hoped that this department will be of the greatest good to all interested in the work of helping each other. It must not be understood as a medium of advertising for sale the goods of any one; but if Mrs. K. of Nebraska, has 20 pieced blocks that she does not need, and wishes to exchange them for five yards of inch and a half edging crocheted of No. 36 white thread, she may state so briefly in a letter to the Farmhouse, and it will be published, with her full address, in the Exchange.

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**DIRECTIONS.**

State as briefly as possible what article you have.

State plainly what you will take in exchange for it.

Give your full name and address at the end of the communication.

At the upper left hand corner of the first page of the letter state the name of the subscriber through whom you write.

**FURTHER INQUIRY.**

Will "Tilda" please tell me what "Green-leaf 1c" is, and if any other kind will do? We cannot get it in this vicinity, and since reading her recipe I would like to try it. We live on a sheep ranch and throw away many pounds of tallow that might be converted into a useful commodity.—MRS. MARY GREEN, Lacy, Mont.

In this case "Tilda" will see an opportunity of doing another woman a favor by dropping a postal to the above address giving the desired information.

Will the person who mailed a manuscript to the Farmhouse signed Mrs. Laura Ball please give her Postoffice address?—EDITOR FARMHOUSE.

**TIDBITS.**

[Contributions solicited from all readers.—Ed.]

**TATTED EDGE.**

This edge is made with 2 shuttles and in 3 rows. Make lower row first. Fill both shuttles and fasten ends of shuttle threads together.

With 1 shuttle make a ring of 3 dk, 1 p, 3 dk, 1 p, 3 dk, 1 p, 3 dk (according to fill instruction given when I last wrote). Pass this ring and all others made should be fastened so that when the edging is stretched the ring will not pull apart. To do this, with a crochet-needle draw the thread under the ring where the knots meet to form the circle, through the loop formed by doing this pass the shuttle, then draw thread tight. Now turn the ring so that the middle pivot will be downward, pass thread from the other shuttle

to the right.

With 1 shuttle make a ring of 3 dk, 1 p, 3 dk; with ring thread make 3 dk, join to last p of previous ring. Pass this ring and all others made should be fastened so that when the edging is stretched the ring will not pull apart. To do this, with a crochet-needle draw the thread under the ring where the knots meet to form the circle, through the loop formed by doing this pass the shuttle, then draw thread tight. Now turn the ring so that the middle pivot will be downward, pass thread from the other shuttle to the right.

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With 1

## MUMMY BROWN.

## A Story of Pre-Existence.

**R**ICHARDSON picked up the soft little cylinder and looked at it again.

"What did you call it?" he asked. "Mummy brown," replied Knowlton, taking a brush over between his lips to speak and touching the can.

"Brown undoubtedly is," remarked his master, "but where does the mummy come in?"

"In the tube, my boy," returned the painter, half closing his eyes and putting his hand on one side to observe the effect his hand had stroke. "Because it is made of his last stroke." Because it is made of his last stroke. "Because it is made of his last stroke. Egyptian mummies, and it is one of the best colors we have."

Richardson put the tube back upon the much littered studio table, and whistled softly.

"Well," said he, "you may count me patient, half closing his eyes and putting his hand on one side to observe the effect his hand had stroke. "Because it is made of his last stroke. "Because it is made of his last stroke. Egyptian mummies, and it is one of the best colors we have."

Richardson put the tube back upon the much littered studio table, and whistled softly.

"I am a fool!" he exclaimed impatiently, "and hungry, I dare say. No wonder I imagine things!" and catching up the worn soft hat that lay beside his mended bed he hurried out into the hall and down the weary length of stairs to the street.

But as he closed the door a small, heavy bladed dirk, upon a shelf directly over the spot where he had hastily shoved the unfinished picture and its easel, jarred by his haste, whirled slowly around until it rested upon the very edge of the shelf, where it balanced to and fro and trembled in the little breeze that still puffed in at the open window.

\* \* \* \* \* Morgan, the favorite story teller of the Bohemian Idler's club, was talking to Richardson and the painter came in from their journey to the pawnshop, and the usual audience of interested listeners was collected about him.

"It may or may not have been a humbug," he was saying, with a shrug of his shabby genteel shoulders, "but it was devilish queer any way you take it. I saw the man do it five times, too, and he failed but once."

"What do you call it—hypnotism?" asked a newcomer.

"I don't know; he simply says he sensitizes the water and lets you call it what you like. First he puts the tumbler of plain hydrant water into one room, and he and the subject go into another. He makes a few passes—that is where the hypnotism comes in, I suppose—and once the man is under his control the Professor walks into the other room and stands with his hands over that tumbler of water for perhaps a minute, not uttering a sound. Then he sends some of us into the room with the sleeping subject, and he stays with the rest of the witnesses. When everything is ready, he tells one of them to take his penknife and thrust the blade carefully into the water. He does so, and we hear a muffled scream from the other room, as if the hypnotized man had felt the stab. This was repeated three times, and every time the subject screamed and twisted about in his chair, as if in agony while the knife remained in the water. As soon as it was removed, the pain apparently ceased, and he rested quietly again. I was skeptical of course," concluded the talkative Morgan, "and said it was all chicanery, but after seeing the thing half a dozen times I felt differently, and I must say that it is extremely peculiar, if not mysterious."

"What had the subject to say for himself when he came to?" asked Richardson, who had joined the group.

"Very little, except that some one had tried to stab him and had succeeded three times in sticking a knife into his back, he thought."

"And did he know of the tumbler of water and its bearing on his hallucination?"

"No, he had been kept in still another room when first brought to the house, and had not seen or heard of the water."

"That is rather peculiar," said Richardson thoughtfully. "I should like to have seen it myself." As he spoke, he touched the paint with the tip of one finger, and a shiver at the same time passed over him, leaving him strangely pale and shaken.

"Yes, but—hello, what's wrong?" exclaimed Richardson, noticing the change in his friend's face.

"Nothing—I don't know—a touch of vertigo, that's all," returned the painter, confusedly. "I—what were you saying?"

"Only that if your supposition were so the contact of the two bodies—the new and the old—would make itself felt in the new."

"Yes," said Knowlton, smiling again and returning to his work; "but I do not believe in transmigration to that extent, my dear fellow. There is a line, you know, that even we fanatics have to draw, and I rather imagine it is somewhere near that point in this case. But, to change the subject, will you be at the Idler to-night, as usual?" If Mrs. McGwiggins should happen to take it into her good old head to ask me to pay or skip out, I'll have to realize on some of my personal property, and as I don't know the best places in town, I want you to steer me around. Won't object, will you?"

"Not in the least. My services are always at your disposal, and I'll be at the club at half past seven or eight. And now I must tear myself away; so until

"Or, better still, returned Knowlton, squeezing a fresh supply of the paint out upon his palette, "my own old time body, say!" As he spoke, he touched the paint with the tip of one finger, and a shiver at the same time passed over him, leaving him strangely pale and shaken.

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"And the end of the sentence was lost in the slight slam of the door as he went out. The artist listened until the echo of his friend's retreating footsteps had died into the murmurous silence of the great tenement in which he lived, and then going softly to the door himself he turned the key in it. Coming back to the table, he drew his chair close up to it and cast a furtive glance about the unhomely room and into the deep shadows that lurked in the cobwebby corners. Then, with compressed lips and trembling hands, he drew the palette to him and gently pressed a finger into the little dab of mummy stuff still upon it.

A cold thrill shot up his arm, shaking the very nerve centers of his body as it did so, and making him shudder again and again, even as he sank back into the chair half unconscious. In another moment a sudden dusk filled the room, through which the familiar pieces of furniture and draperies seemed to lose their familiarity and to take new shapes

and colors unto themselves. With staring eyes he strove to pierce the mist that half obscured his vision, and to shake off the weird feeling that had seized upon him, but gradually the lids dropped and closed, and to his distended nostrils there came, as he lost consciousness, a faint, sweet odor which even then he recognized—the smell of cedar, pitch, and myrrh. How long the terrible dream which followed lasted he could not know, but at last he awoke to life again, and struggling to his feet he staggered to the window, threw it open, and let the faint breath of air stirring in the courtyard far below sweep up past him into the dark room behind. The dusk was just falling over the city, and far, far below him he could hear the tempestuous inhabitants of the first and second floors preparing their evening meal, singing and cursing by turns as the preparation pleased or displeased them. The night air cooled his fevered face and refreshed him, however, and the great beads of perspiration that had gathered on his forehead were gone as he turned back to the room again.

"I am a fool!" he exclaimed impatiently, "and hungry, I dare say. No wonder I imagine things!" and catching up the worn soft hat that lay beside his mended bed he hurried out into the hall and down the weary length of stairs to the street.

But as he closed the door a small, heavy bladed dirk, upon a shelf directly over the spot where he had hastily shoved the unfinished picture and its easel, jarred by his haste, whirled slowly around until it rested upon the very edge of the shelf, where it balanced to and fro and trembled in the little breeze that still puffed in at the open window.

\* \* \* \* \* Richardson said he was entirely too dead for anything of that sort, you may be sure, and if they are sensitive to feeling they never show it. Observe how I am using this tube, for instance; upon this Frenchman's coat. Do you suppose any well meaning Egyptian would like to have himself clothing a foreigner in any such manner, if he knew it?"

"No," said Knowlton, laughing; "they are entirely too dead for anything of that sort, you may be sure, and if they are sensitive to feeling they never show it. Observe how I am using this tube, for instance; upon this Frenchman's coat. Do you suppose any well meaning Egyptian would like to have himself clothing a foreigner in any such manner, if he knew it?"

"No, I suppose not. \* \* \* The coloring is rich, too," remarked Richardson, thrusting his hands deep into his pockets and surveying his friend's work with the eye of an uneducated critic, "though the same can't be said of the models judging from appearances. And by the powers that be, Francis," he added suddenly, "you've made that tall fellow a very good likeness of you! Did you know it?"

Knowlton shrugged his shoulders. "I had an idea his face was something like mine," he answered, "but that is a common trick of ours I have not given it a second thought. What I am striv- ing for is a good picture, not portraits, and I must realize something from it, too. By heavens, Richardson, it has come to a case of dire necessity, and that's all there is to it!"

"Rent not paid?" asked his friend. "That's too bad—I've been there myself, and then it is a very uncomfortable thing to have hanging over one. As long as one can climb up and down the water pipe, and thus avoid meeting the landlord on the stairs, life is made endurable, but with you, I suppose?"

"There isn't a water pipe within 20 feet of my window. No, I must sell, or get out, so—the mummy brown, again, if you please!"

Richardson handed the paint to him once more, somewhat gingerly. "I can't help feeling I'm dealing with a piece of a dead body," he said, coloring at Knowlton's pitying look, "and I should think you would do the same, believing, as you say you do, in transmigration and reincarnation, and all that sort of stuff. Suppose, for instance, that you were painting this picture with a piece of your own father's body, when he was an Egyptian, 10,000 years ago!"

"Or, better still, returned Knowlton, squezing a fresh supply of the paint out upon his palette, "my own old time body, say!" As he spoke, he touched the paint with the tip of one finger, and a shiver at the same time passed over him, leaving him strangely pale and shaken.

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"Not in the least. My services are always at your disposal, and I'll be at the club at half past seven or eight. And now I must tear myself away; so until

"And the end of the sentence was lost in the slight slam of the door as he went out. The artist listened until the echo of his friend's retreating footsteps had died into the murmurous silence of the great tenement in which he lived, and then going softly to the door himself he turned the key in it. Coming back to the table, he drew his chair close up to it and cast a furtive glance about the unhomely room and into the deep shadows that lurked in the cobwebby corners. Then, with compressed lips and trembling hands, he drew the palette to him and gently pressed a finger into the little dab of mummy stuff still upon it.

A cold thrill shot up his arm, shaking the very nerve centers of his body as it did so, and making him shudder again and again, even as he sank back into the chair half unconscious. In another moment a sudden dusk filled the room, through which the familiar pieces of furniture and draperies seemed to lose their familiarity and to take new shapes

and colors unto themselves. With staring eyes he strove to pierce the mist that half obscured his vision, and to shake off the weird feeling that had seized upon him, but gradually the lids dropped and closed, and to his distended nostrils there came, as he lost consciousness, a faint, sweet odor which even then he recognized—the smell of cedar, pitch, and myrrh. How long the terrible dream which followed lasted he could not know, but at last he awoke to life again, and struggling to his feet he staggered to the window, threw it open, and let the faint breath of air stirring in the courtyard far below sweep up past him into the dark room behind. The dusk was just falling over the city, and far, far below him he could hear the tempestuous inhabitants of the first and second floors preparing their evening meal, singing and cursing by turns as the preparation pleased or displeased them. The night air cooled his fevered face and refreshed him, however, and the great beads of perspiration that had gathered on his forehead were gone as he turned back to the room again.

"My God!" he cried, recollecting from the painting as if it were alive, and staring down at it with horror filled eyes. Then he hurried past it and threw open the shutters, letting a flood of light into the room. A stray bit of early sunshine fought its way through the grim covered window and crept along the floor to where the easel stood, and doing so it lighted upon a bright bit of metal that caught and reflected the light into Richardson's face.

Beneath the easel, as if hiding like a common murderer from justice, was the heavy dirk, driven into the uncarpeted floor an inch. Some night wind, more boisterous than the rest, had shaken it from the shelf, and plunging downward to the floor it had passed directly through the painting, not an eighth of an inch from the heart of the largest figure on the canvas—the man in the brown coat.—*Argonaut.*

his haste, he turned deadly pale and caught at the mantel for support.

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BEET SUGAR.

How It is Manufactured, and the Expenses.

EDITOR AMERICAN FARMER: Can you give a description of the process of making beet sugar, the cost of machinery, etc, for a small plant?

The following is the process for making sugar from beets:

The beets are first conveyed to washing-tanks provided with suitable apparatus for keeping them in motion and transferring them toward the end from which the fresh water enters, in order that the whole of the adhering soil, together with any sand and pebbles, may be completely removed. By a suitable elevator the beets are next taken to a point above the center of the battery, whence they are dropped into a slicing apparatus by which they are sliced into pieces of greater or less length and of small thickness, so that when placed in the cells of the battery they will not lie so closely together as to prevent the circulation of the diffusion juices. The slices, commonly called cassettes, next pass into the diffusion battery, in which the sugar is extracted in the usual way. The extracted cassettes are carried through a press by which a portion of the water is removed, and they are then in suitable condition for use as cattle food. The diffusion juices are carried to carbonation tanks in which the sugar is separated from the water, and the plants are then washed and sent to the sugar factory.

If about to go into small fruit raising, conduct it in a clean and accurate manner, with good land, and improve the quality or favor of the soil.

For the potato crop, sulphate is thought to be much better than muriate of potash, for it gives a greater yield, but not for a single year, while poor plants last over many seasons.

Never set plants of a poor quality. Poor seed will make a failure, but it is estimated that one ounce of seed will produce about 2,500 plants.

Many are discarding the Pole Lima, and taking up the Bush Lima Bean as a specialty.

Sow celery seed early in April. It is estimated that one ounce of seed will produce about 2,500 plants.

Never set plants of a poor quality.

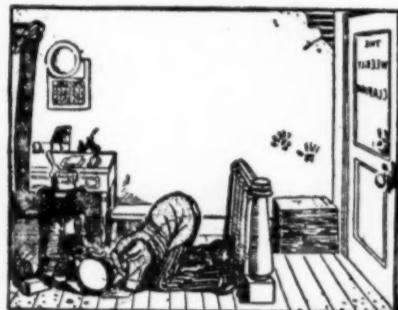
Potash is good for the potato crop.

Never set plants of a poor quality.

Never set plants of a poor quality.</p



Poet (entering)—I would like to leave this poem, in the hope that we will be able to use it. Good day."



The Editor—Able to use it? Well, I should smile!



The Editor (writing)—Mr. T. Emerson Gibbs—Your poem is accepted, and will be paid for on publication. We would like to add that there is more poetic warmth in these verses than in any we have received lately.—Puck.



Uncle Mose—Was you up to de chuk di mawmin', Ephraim? Ephraim—I was dar.

Uncle Mose—What was de tex?

Ephraim—De tex' was dat de rich man shall neber jump thro' de eye ob de caymel 'less he hol's a needle in his han'.

Uncle Mose—What de rich man wan do dat, foh?

Ephraim—I doan' know, Uncle Mose; but dat was de tex.—Judge.

An Ideal Spot.



Farmer Freezout—Now, I'd jest like to know what you man bought this here tract of land for, even at two dollars an acre? The thermometer ain't much above freezin' nine months in the year, and I've 'most starved ever since I owned it.

Mr. Cyndicate—Why, certainly, my good man. We intend to boom it into a Winter resort for fashionable New York invalids.—Puck.

A Hint.

Mr. Stalate—Here I am left with a fortune to spend. Now, what would you advise me to do first?

Miss Spicy—I should think a trip home would be the very thing.

Fallen Indeed.

Restful Rags—What's become of Pete?

Weary William (shaking his head)—Don't ask me, Ragsy. He's gone to the bad.

Restful Rags—In jail, eh?

Weary William—Worse than that! He's workin' reg'lar in a factory.—Kate Field's Washington.

## NATIONAL DAIRY CONGRESS. An Earnest Meeting, Resulting in Good.

A convention of delegates from the various State dairy associations of the United States was held in Cleveland, Ohio, on Feb. 7 and 8, pursuant to a call issued in October by the Superintendents of Dairy Exhibits at the World's Fair from the various States. A permanent organization was effected, and the following Constitution adopted:

**CONSTITUTION.**

Article 1.—This association shall be known as The National Dairy Congress.

Article 2.—Its object shall be to promote the interest of all dairy products, and elevate its standard of all dairy products.

Article 3.—The National Dairy Congress shall be composed of two delegates from each State dairy association and one delegate from each Experiment Station that conducts dairy experimental work. Provided, that in those States where no State dairy association exists, the Governor may appoint two delegates, who shall be practical dairymen.

Article 4.—Each State dairy association or Governor, as provided in Article 3, may appoint two delegates to attend the annual meeting to be held in the year 1895, one of which shall continue for two years and one for one year. Each year hereafter (beginning with the year 1896) one delegate may be appointed for two years.

Article 5.—The officers shall consist of a President, Vice-President, Secretary and Treasurer, who shall constitute the Executive Committee.

Article 6.—The President shall preside at all meetings, except in his absence, when the Vice-President shall be the presiding officer. The Secretary and Treasurer shall perform the duties usual to these offices in like organizations.

Article 7.—The Executive Committee shall have power to transact all business it may deem necessary, which was not done at the annual meeting.

Article 8.—In all meetings of the National Dairy Congress each State shall be entitled to three votes to be cast by their delegates present.

Article 9.—Each State sending delegates shall pay annually \$20 for their dairy association or department and \$10 for each Experiment Station, as dues for the expenses of the National Dairy Congress.

Article 10.—All officers shall be elected by ballot at the annual meeting and hold their offices for one year, and until their successors are elected and qualified.

Article 11.—All vacancies shall be filled by the Executive Committee until the next annual election.

Article 12.—This Constitution may be amended at any annual meeting by a two-thirds vote of all members present.

Officers were elected as follows: President, H. M. Arms, Springfield, Vt.; Vice-President, J. T. Hickman, Experiment Station, Ohio; Secretary, D. P. Ashburn, Gibson, Neb.; Treasurer, L. C. Gabrison, New Hampton, Iowa. These four officers constitute the Executive Committee.

The following resolutions were adopted:

"Whereas this Congress recognizes the importance of the home dairy as being the primary condition of the dairy industry in all new and sparsely settled communities, of necessity going before and forming the basis of all subsequent co-operative work: Therefore,

"Resolved, That the National Dairy Congress will, in all legitimate ways, encourage the establishment of dairy schools, and in all judicious ways use its influence to carry light and help to the isolated dairy farmer.

"Resolved, That we view with favor the introduction of Senate Bill No. 1376, by Senator Hill, of New York, for the purpose of placing oomargarine and all imitation butter and cheese under the control of the laws of the several States, when imported from one State to another in the original package or otherwise, and we urge upon Congress its early enactment.

"Resolved, That we extend the hand of fellowship to our sister organization, 'The National Dairy Union,' which has been organized for the protection of the dairy interests of National and State Legislation to protect the dairymen of the United States against the sale of counterfeit food products made in imitation or semblance of pure butter or cheese.

We accept with thanks its assurance of cooperation and wish it God-speed in the work it has undertaken.

"Resolved, That the thanks of the National Dairy Congress are due, and are hereby extended, to the representatives of the various newspapers who have so kindly reported the proceedings and materially aided in the conduct of our sessions."

The Executive Committee were instructed to take such steps as they may deem necessary to urge upon all members of Congress the passage of the Hill Bill, Senate bill No. 1376.

Also, to collect and promulgate all available information tending to show the cause and character of the diseases of dairy animals in all parts of the United States, together with the means of prevention and cure, and to this end communicate and co-operate with the Bureau of Animal Industry at Washington, and the various Experiment Stations.

Also, to take such steps as in their judgment will best secure the purity of all dairy products and elevate the standard thereof.

Also, to request each State dairy association to annually report to the National Dairy Congress its Secretary, or its Executive Committee, on the following points:

1. What measures of a National character does your association feel the need of and desire to have the National Dairy Congress bring before the public?

2. What National legislation will benefit the dairy industry in your State?

3. What dairy legislation has been passed in your State during the past year?

4. What laws have you in your State that are directly beneficial to the dairy industry?

5. What measures would you suggest to the Secretary of Agriculture at Washington that would increase the usefulness of his Department?

6. What special lines of association would be particularly useful to your association?

7. What is the general system of conducting the meetings of your association? Are they entirely of a literary character, or are they usually connected with exhibits of dairy products and supplies?

8. In what particular branch of the dairy business are your officers personally interested? Whether dairymen, creamerymen, cheesemakers, experimenters or supply dealers, etc.

9. Have you tried any new methods of conducting your meetings; and if so, with what success?

Amending a Quotation.

"It is easier," the curate read, "for a camel to go through the eye of a needle!" He saw the vicar's stony stare fixed on him, and realized that he was making a mistake. He blushed, coughed slightly and corrected himself: "It is easier for a camel to go through the knee of an idol." Then he went on quite happily.—To-Day.

What They Were For.

Mrs. Billus (after the company had gone)—Johnny, you shouldn't have eaten those preserved fruits. They were not intended to be eaten. They were put on the table to fill up.

Johnny—Well, that's what I used 'em for, mamma.—Boston Globe.

Reason and Instinct.

Bobby—Pop, what is reason?

Fond Parent—Reason, my boy, is that which enables a man to determine what is right.

Bobby—And what is instinct?

Fond Parent—Instinct—that which tells a woman she is right, whether she is or not.—Brooklyn Life.

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